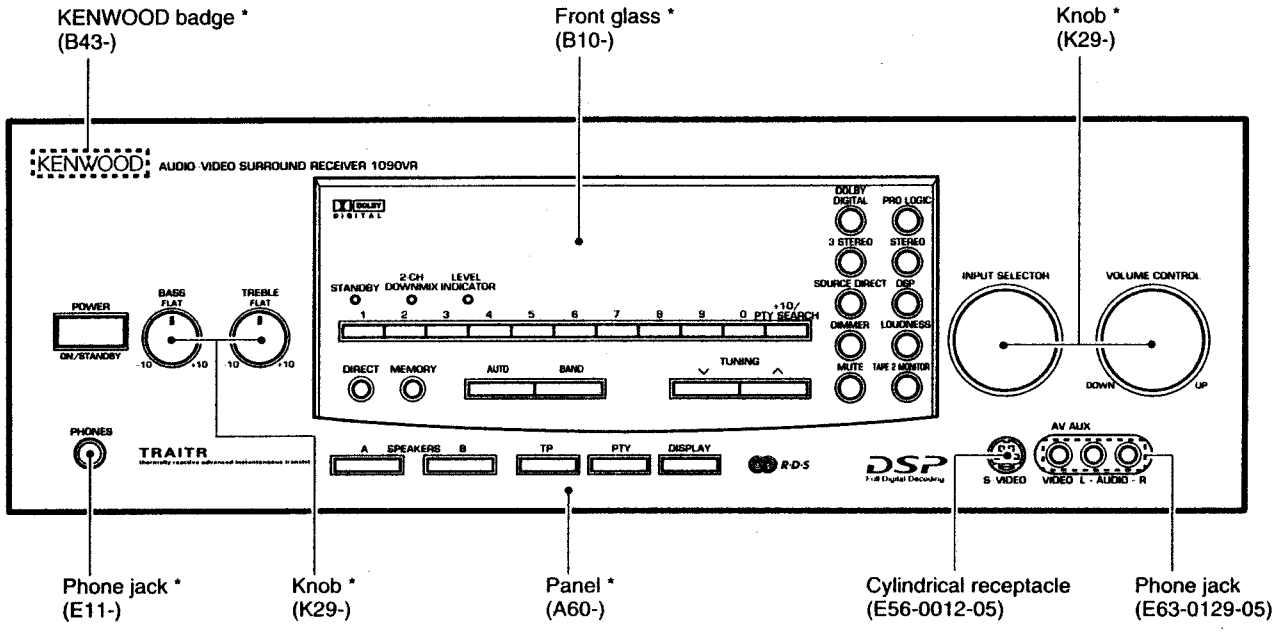
AUDIO VIDEO SURROUND RECEIVER

KR-V999D/1090VR

SERVICE MANUAL

KENWOOD

© 1997-4/B51-5303-00 (K/K) 3513



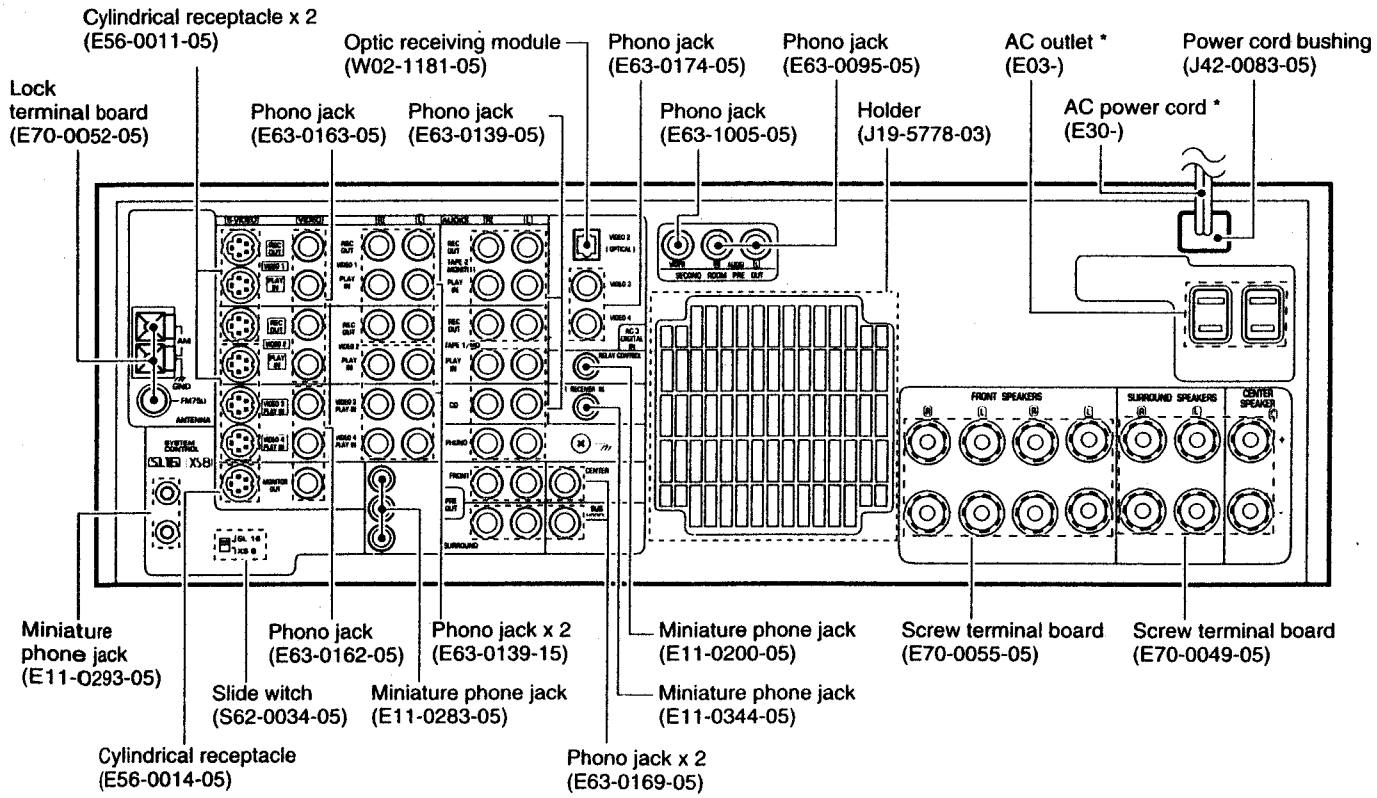


Illustration is KR-1090VR.

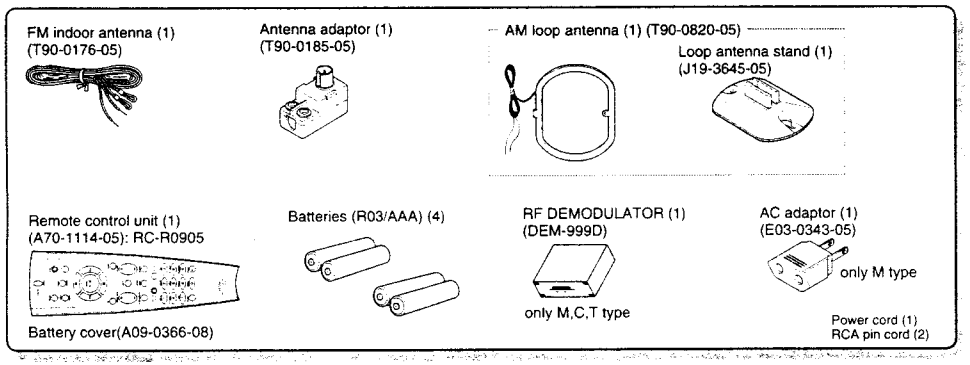
*** Refer to parts list on page 67.**

CONTENTS / ACCESSORIES

Contents

CONTENTS / ACCESSORIES 2
CONTROLS 3
DISASSEMBLY FOR REPAIR 5
BLOCK DIAGRAM 6
CIRCUIT DESCRIPTION 8
ADJUSTMENT 18
WIRING DIAGRAM 19
PC BOARD 22
SCHEMATIC DIAGRAM 35
EXPLODED VIEW 66
PARTS LIST 67
SPECIFICATIONS 82

Accessories

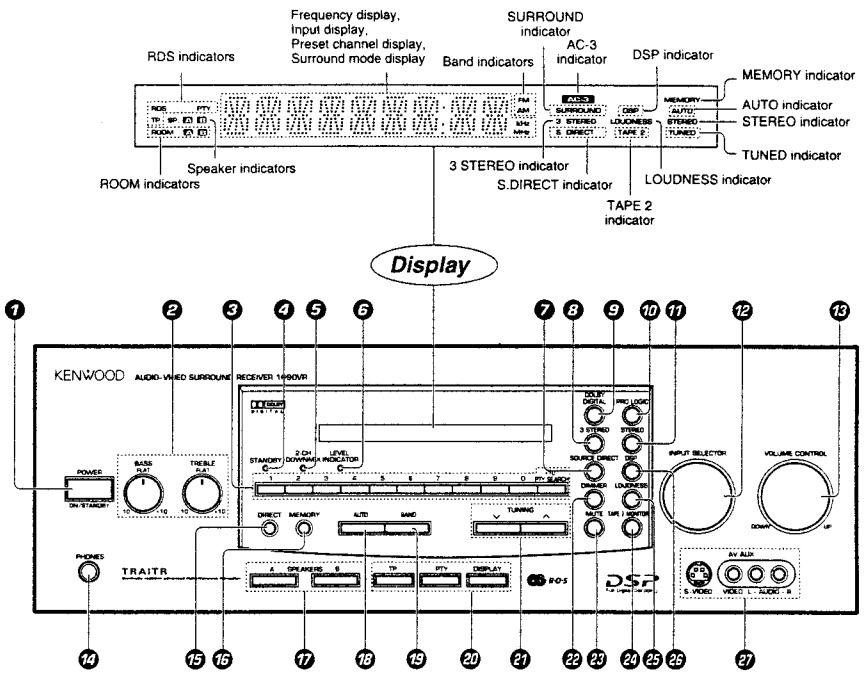


Refer to service manual of model names **DEM-999D(part number B51-5294-00)**, when **RF DEMODULATOR(DEM-999D)** is repaired.

1090VR is a model name of case that the destination of **KR-V999D** is KPY.

In a circuit explanation part, **1090VR** is expressing as **KR-V999D**.

CONTROLS



❶ POWER key
Use to switch the power ON/STANDBY.

❷ Tone Control knobs

❸ Numeric keys

❹ STANDBY indicator

❺ 2 CH DOWNMIX indicator
Lights when an DOLBY DIGITAL (AC-3) format signal is being downmixed to 2 channel stereo.

❻ LEVEL indicator
Lights when the level of the signal being input is too high.

❼ SOURCE DIRECT key

❽ DOLBY 3 STEREO key
Use to turn on the DOLBY 3 STEREO mode.

❾ DOLBY DIGITAL key
Use to turn on the DOLBY DIGITAL (AC-3) mode.

❿ PRO LOGIC key
Use to turn on the DOLBY PRO LOGIC mode.

⓫ STEREO key
Use to cancel the surround mode.

⓬ INPUT SELECTOR knob
Use to select the input sources.

⓭ VOLUME CONTROL knob

⓮ PHONES jack
Use for headphone listening.

⓯ DIRECT key
Use to tune radio stations directly by numerical input.

⓰ MEMORY key
Use to store radio stations in the preset memory.

⓱ SPEAKERS A/B keys
Use to turn the speakers ON/OFF.

⓲ AUTO key
Use to select the auto tuning mode.

⓳ BAND key
Use to select the broadcast band.

⓴ RDS keys

㉑ TUNING keys
Use to tune in radio broadcasts.

㉒ DIMMER key
Use to adjust the brightness of the display.

㉓ MUTE key
Use to mute the sound.

㉔ TAPE 2 MONITOR key
Use to monitor a recording.

㉕ LOUDNESS key
Use to activate the frequency weighting network.

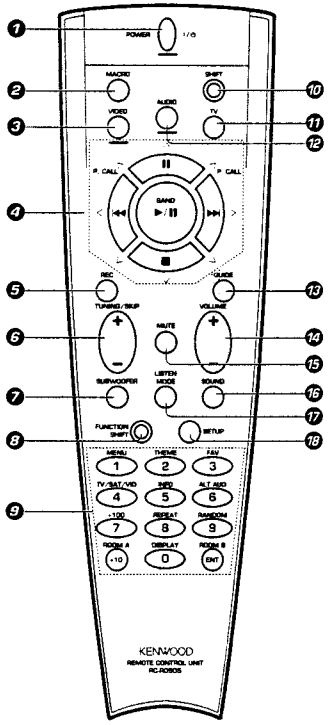
㉖ DSP key
Use to turn on, or switch, the DSP mode.

㉗ AV AUX jacks

About the STANDBY indicator

This unit has a **STANDBY** indicator. When the **STANDBY** indicator is lit, the unit consumes a small amount of power to preserve the memory. This is called STANDBY mode. This mode also lets you turn the power ON using the remote control.

REMOTE CONTROL OPERATION



❶ POWER key
Use to turn the receiver on and off.
Use in combination with the input selector (AUDIO, VIDEO, or TV) keys and SHIFT key to turn various components on and off.

❷ MACRO key
Use in combination with the AUDIO, VIDEO, or TV keys to execute a series of commands automatically (MACRO PLAY).

❸ VIDEO selector key
Selects the video inputs (VIDEO 1, VIDEO 2, VIDEO 3, VIDEO 4, AV AUX) and sets the remote to operate the component registered at the respective input.

❹ Multi control keys
Use to operate the selected component and to operate the on-screen display.

❺ REC key
Use to operate the selected component.

❻ TUNING/SKIP key
Use during the setup procedure to specify various settings. Use to operate the tuner or selected component.

❼ SUBWOOFER key
Use in combination with the VOLUME +/- keys to adjust the volume of the subwoofer.

❽ FUNCTION SHIFT key
Use in combination with the numeric keys to execute alternate commands.

❾ Numeric keys
Provide functions identical to those of the original remote supplied with the component you are controlling.
To access the functions printed above the keys, Press within 3 seconds of pressing the FUNCTION SHIFT key. Function availability varies for each component.

❿ SHIFT key
Use in combination with the AUDIO and VIDEO keys to change the remote control mode without changing the input selector or in combination with the POWER key to turn on and off components programmed into the remote.

⓫ TV selector key
Sets the remote to operate a TV or cable box (TV 1, TV 2, CABLE). This key does not change the input selector on the receiver.

⓬ AUDIO selector key
Selects the audio inputs (CD, TAPE1/MD. TUNER, PHONO) and sets the remote to operate the respective KENWOOD audio component.
If you connect audio components from KENWOOD and other makers to the TAPE1/MD or CD jacks, you can set the remote to operate these components by registering the appropriate setup code at the respective input.

⓭ GUIDE key
Use to activate the OSD menu functions of registered components.

⓮ VOLUME key
Use to adjust the receiver volume.

⓯ MUTE key
Use to temporarily mute the sound.

⓰ SOUND key
Use to activate the Sound OSD and set the remote to OSD control mode.

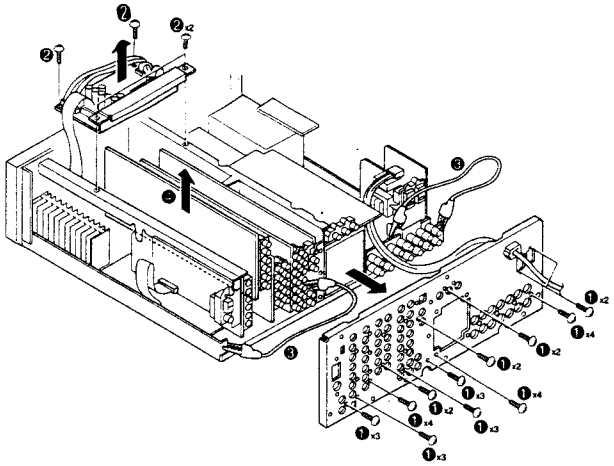
⓱ LISTEN MODE key
Use to select the desired surround mode.

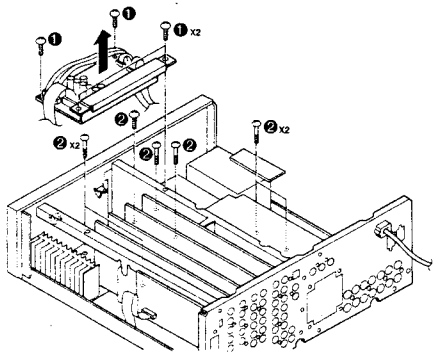
⓲ SETUP key
Use to activate the Setup OSD and set the remote to OSD control mode.

DISASSEMBLY FOR REPAIR

Check the vertical PCB.

1. Remove the 32 screws (❶), then remove the rear panel.
2. Remove the 4 screws (❷), then remove the fuse PCB.
3. Connect the GND of the vertical PCB and the chassis, the GND of the speaker terminal and the chassis with 2 alligator clip(❸).
4. Remove a vertical PCB (❹), then check the vertical PCB.

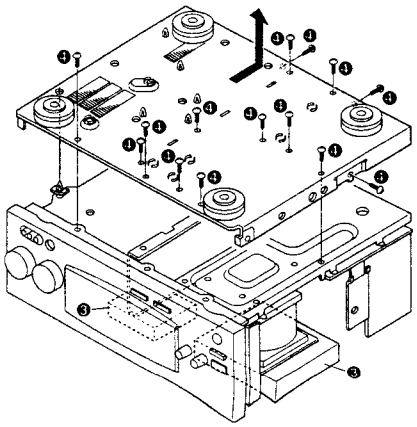




Remove the bottom plate.

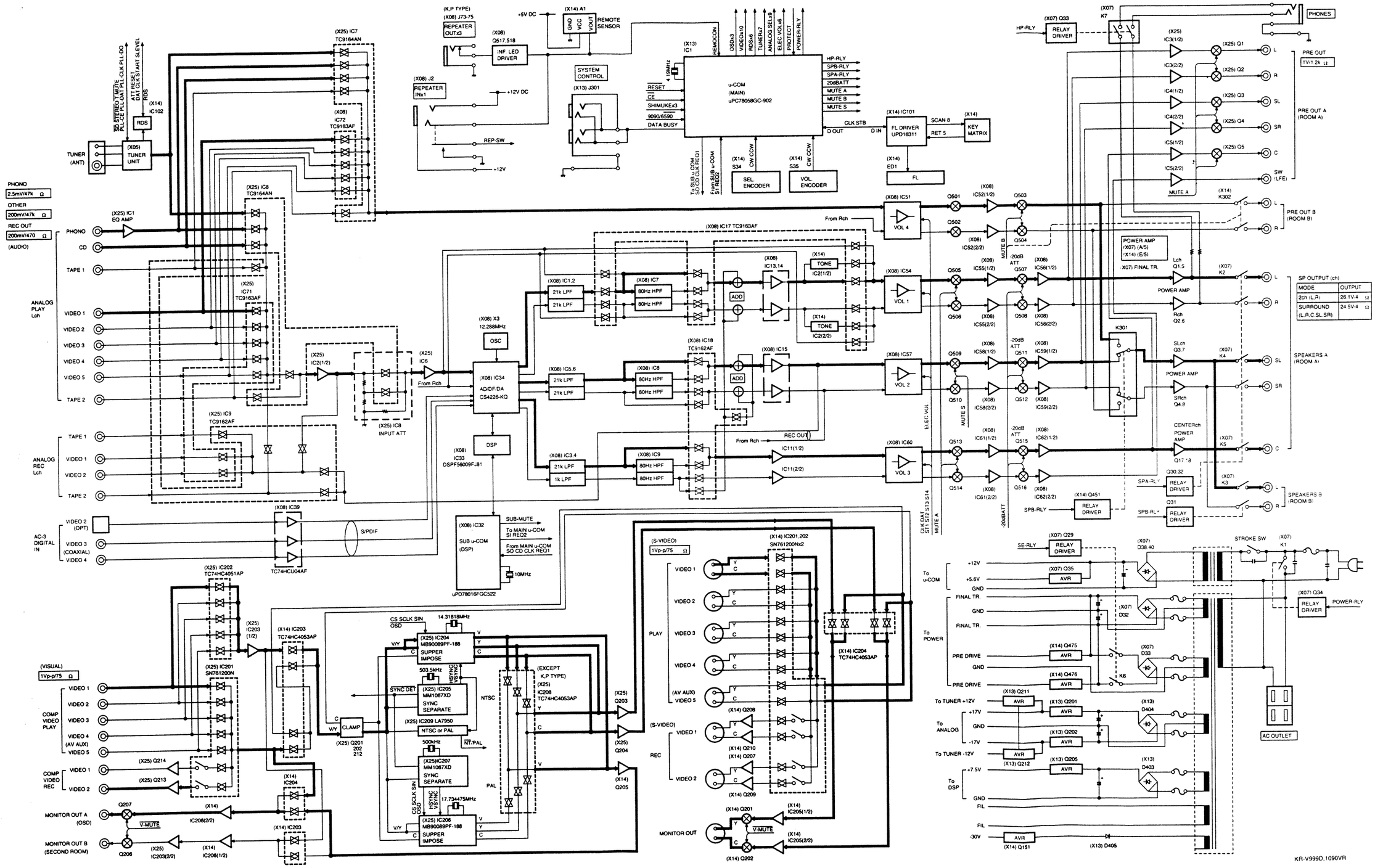
Make use of the changing final transistor etc.

1. Remove the 4 screws (❶), then remove the fuse PCB.
2. Remove the 7 screws (❷), then assemble the fuse PCB and the 4 screws (❶).
3. Lay the 2 boxes (❸), then upside down the KR-V999D.
4. Remove the 14 screws (❹) and PCB support, then remove the bottom plate.



KR-V999D/1090VR

BLOCK DIAGRAM



1. A initialization condition

POWER ON/OFF	: OFF
MAIN VOLUME LEVEL	: -66dB
SOUND INPUT SELECTOR (KR-V999D : ROOM A,B)	: TUNER
PICTURE SIGNAL INPUT SELECTOR (KR-V999D : ROOM A,B)	: VIDEO 1
SPEAKER A	: ON
SPEAKER B	: OFF
TAPE 2 / MONITOR (KR-V999D ONLY)	: OFF
SOURCE DIRECT	: OFF
DIMMER	: DIMMER 1
LOUDNESS	: OFF
OSD DISPLAY MODE	: ON
FL DISPLAY MODE	: SELECTOR
SURROUND MODE	: STEREO
FRONT SPEAKER	: LARGE
CENTER SPEAKER	: LARGE
REAR SPEAKER	: LARGE
SUB WOOFER	: OFF
EACH CHANNEL LEVEL	: 0dB
TONE BASS (KR-V888 ONLY)	: 0dB
TONE TREBLE (KR-V888 ONLY)	: 0dB
TUNING MODE	: AUTO
PRESET MEMORY	:TEST FREQUENCY (MAKER MEMORY)
LAST BAND	: FM
FM LAST FREQUENCY	: 87.5MHz (Except J) : 76.0MHz (J)
AM LAST FREQUENCY	: 531kHz (CH.SP 9kHz) : 530kHz (CH.SP 10kHz)
LAST P.ch	: —ch
PTY SELECT MODE	: OFF
PTY SEARCH MODE	: OFF
TP SEARCH MODE	: OFF
RDS DISPLAY MODE	: PS MODE
TA / NEWS / INFO.	: OFF
OSD RT DISPLAY MODE	: ON

2. The condition which each memory becomes the initial state.

- When fixation data is not a specified value. each memory becomes the initial state.
- When a test mode flag and all illumination flag are not set up at the time of a reset, each memory becomes the initial state.
- When KR-V999D is reset while pressing POWER switch, each memory becomes the initial state. (When AC plug is connected to an outlet)
- If the destination of a tuner is changing when KR-V999D is reset, each memory becomes the initial state. Or, if the condition of CH.SPACE switch is changing when KR-V999D is reset. each memory becomes the initial state.
- If all electron volume data are back-up previous condition, when KR-V999D is reset, each memory becomes the initial state.
- If the data of all electron volume is not agreeing completely when KR-V999D is reset, each memory becomes the initial state.
- When KR-V999D is reset the value of a memory is added. Or the value of a memory is added when back-up is done. And, a checksum is calculated. And, if the checksum that was calculated does not agree, each memory becomes the initial state.

KR-V999D/1090VR
CIRCUIT DESCRIPTION

3. TUNER PRESET MEMORY FREQUENCY(INITIALIZE)

Channel	BAND	K1 TYPE	BAND	K2 TYPE	BAND	E1/E3 TYPE	BAND	Q TYPE
01ch	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
02ch	FM	98.00MHz	FM	98.00MHz	FM	98.00MHz	FM	98.00MHz
03ch	FM	108.00MHz	FM	108.00MHz	FM	108.00MHZ	FM	108.00MHZ
04ch	AM	630kHz	AM	630kHz	AM	630kHz	AM	630kHz
05ch	AM	1000kHz	AM	1000kHz	AM	999kHz	AM	999kHz
06ch	AM	1440kHz	AM	1440kHz	AM	1440kHz	AM	1440kHz
07ch	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz	FML	74.00MHz
08ch	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz	FML	65.00MHz
09ch	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz	FML	69.00MHz
10ch	FM	89.10MHz	FM	89.10MHz	FM	89.10MHz	FM	89.10MHz
11ch	FM	90.00MHz	FM	90.00MHz	FM	90.00MHz	FM	90.00MHz
12ch	FM	97.50MHz	FM	97.50MHz	FM	97.50MHz	FM	97.50MHz
13ch	FM	98.50MHz	FM	98.50MHz	FM	98.50MHz	FM	98.50MHz
14ch	FM	106.00MHz	FM	106.00MHz	FM	106.00MHz	FM	106.00MHz
15ch	AM	530kHz	AM	530kHz	AM	531kHz	AM	531kHz
16ch	AM	990kHz	AM	990kHz	AM	990kHz	AM	990kHz
17ch	AM	1700kHz	AM	1610kHz	AM	1602kHz	AM	1602kHz
18ch	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
19ch	FM	87.50MHz	FM	87.50MHZ	FM	87.50MHz	FM	87.50MHz
20ch	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz
21~40ch	FM	76.00MHz	FM	87.50MHz	FM	87.50MHz	FM	87.50MHz

The initial setting is performed in a following event :
1. When backup memory data is destroyed when reset is applied to the microprocessor.
2. When the power cord is plugged in to the AC wall outlet while pressing the POWER key.

4. Condition by the destination or model

Type	BAND	Reception frequency	Channel space	IF	PLL standard frequency	Destination switch 4 (65)	3 (62)	(26)	(25)	(24)
K1(1700) (RBDS)	FM	87.5MHz - 108.0MHz	100kHz	+10.7MHz	50kHz	0	0	1	0	0
	AM	530kHz - 1700kHz	10kHz	+450kHz	10kHz					
K2 (1610)	FM	87.5MHz - 108.0MHz	100kHz	+10.7MHz	50kHz	0	1	0	1	0
	AM	530kHz - 1610kHz	10kHz	+450kHz	10kHz					
K3(1610) (RBDS)	FM	87.5MHz - 108.0MHz	100kHz	+10.7MHz	50kHz	1	0	0	1	0
	AM	530kHz - 1610kHz	10kHz	+450kHz	10kHz					
E1	FM	87.5MHz - 108.0MHz	50kHz	+10.7MHz	50kHz	0 or 1	0 or 1	0	1	0
	AM	531kHz - 1602kHz	9kHz	+450kHz	9kHz					
E2 (RDS)	FM	87.5MHz - 108.0MHz	50kHz	+10.7MHz	50kHz	0	0	1	1	0
	AM	531kHz - 1602kHz	9kHz	+450kHz	9kHz					
M	K2/E1 is switched with only the setting of TSW3. (TSW3=1: K2 type, 0: E1 type)					0	X	0	1	0
Y	K3/E1 is switched with only the setting of TSW3. (TSW3=1: E1 type, 0: K3 type)					1	X	0	1	0
Q (RDS)	FM L	65.0MHz - 74.0MHz	10kHz	+10.7MHz	5kHz	•	•	•	•	•
	FM H	87.5MHz - 108.0MHz	50kHz	+10.7MHz	5kHz					
	AM	531kHz - 1602kHz	9kHz	+450kHz	9kHz					

※ The number inside ○ is a terminal number of a main microprocessor.

KR-V999D/1090VR
CIRCUIT DESCRIPTION

5. Test mode

(1) Test mode setting method
Turn on the power supply while pressing TUNING-DOWN key, to make a set in test mode condition.
When a set is set up in test mode condition a set becomes the following condition.
Automatic POWER ON
All indicator tubes and also LED are lighted. (This condition can be canceled by pressing the key of the set.)
A backup at the thing except ON/OFF of POWER is initialized.

(2) Test mode cancellation method
The power supply is turned off.

(3) A tuner function.
When a selector is set to the tuner, the following key is not usual function and operates by the special function.
The function to summon the channel of the presetting
① The following channel is summoned when not operating +10 keys.
1ch ~ 9ch (1 ~ 9key)
10ch (0key)
② When +10 keys are pressed once, the following channel is summoned.
11ch ~ 19ch (1 ~ 9key)
20ch (0key)
③ When +10 keys are pressed twice, the following channel is summoned.
21ch ~ 29ch (1 ~ 9key)
30ch (0key)
④ When +10 keys are pressed three times, the following channel is summoned.
31ch ~ 39ch (1 ~ 9key)
40ch (0key)
⑤ When +10 keys are pressed four times, it gets to do the function which is the same as the condition which doesn't press +10 keys.
- The S level hexadecimal DATA display and the ATT ON/OFF function
When a selector is set to the tuner, it repeats the following operation cyclically when operating the PTY key of the set.
a) When ATT is in the OFF condition, it displays as follows.
"ATT OFF display" + "Signal level display by the tuner (HEX DATA)"
b) When ATT is in the ON condition, it displays as follows.
"ATT ON display" + "Signal level display by the tuner (HEX DATA)"
c) At the time of the ATT OFF condition, the set becomes usual display.

☆ When the key of a set is pressed a signal level display of a tuner continues to display the value of when that ATT works.
- The display changes by pressing TA•INFO•NEWS key, RDS DISPLAY key and TP key irrespective of the condition of AUTO-MEMORY.

☆ When it is inputting RDS signal the work of TP key is not able to be confirmed.
(TP display has changed by RDS signal.)
- MUTE signal output
Because TUNER-MUTE always becomes OFF condition, it isn't possible to do control.
- RDS display mode.
RDS-PS display works by pressing PRO-LOGIC key irrespective of TUNED. Then, "SURROUND" of an indicator tube is lighted. (It is able to cancel it by pressing PRO-LOGIC key.)
- By pressing MEMORY key, it is possible to do the work of all the lighting-up / usual lighting-up cyclically.

(4) An amplifier function.
- The value in the first of the speaker setting by the test mode is full equipment.
- When a selector is set to the thing except TUNER, the following key works by the special function.
When a selector is set to TUNER, the following key does usual work.

① It is possible to set as follows by operating with the rotary encoder and the stoat key when a selector is set to the thing except TUNER.

Setting item	Ten-key that operates	Master volume
Maximum	2	0dB
Middle	3	-30dB
Minimum	1	-98dB

② The following work is done by operating a ten-key, when a selector is set up other than TUNER.

Condition which displayed	Ten-key that operates	
The setting initial state is a master volume.		
INPUT LEVEL (IL)	4	After pressing the ten-key which was written on the left, press "1" "2" or "3" of the ten-key.
SPEAKER DELAY TIME (DL)	5	
SPEAKER LEVEL FRONT L (L)	6	
SPEAKER LEVEL FRONT R (R)	7	
SPEAKER LEVEL CENTER (C)	8	
SPEAKER LEVEL REAR L (SL)	9	
SPEAKER LEVEL FRONT R (SR)	0	
SPEAKER LEVEL WOOFER (SW)	+10	

③ Test tone operation
While displaying as follows every time it presses DIRECT key when dolby surround is working, it switches a speaker and TEST-TONE is output.
By pressing STEREO key, this work and dolby surround can be canceled.
Lch → Cch → Rch → RSch → LSch → SWch

4 Mute signal output
Because the analog mute always becomes OFF condition, it isn't possible to control absolutely, however, when the value with front volume is the minimum, it becomes an analog mute ON condition.

5 Sub microprocessor mute work
A sub microprocessor mute works, by pressing AUTO/MANUAL key. The work of a sub microprocessor mute is cancelled cyclically, by pressing AUTO/MANUAL key after that.
- The display to this work is not displayed to an indicator tube.

6 Midnight work function.
The following work is done cyclically, each time TUNING-UP key is pressed.

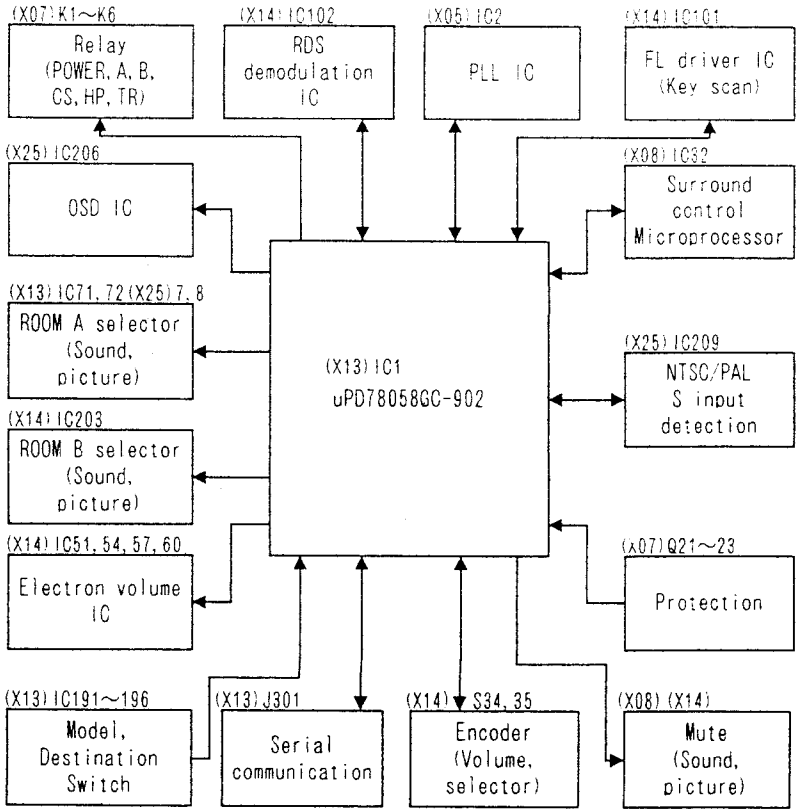
7 Dolby System surround center mode function
The following display is displayed cyclically each time TUNING-UP key is pressed.

8 The sub woofer speaker ON/OFF setting
The setting of the existence or non-existence of a sub woofer speaker is able to set up cyclically each time MEMORY key is pressed.

9 TONE BASS/TREBLE. (KR-V888D/1080VR only)
The following display are done cyclically by pressing TONE BASS/TREBLE, when a test mode is working.

6. Microprocessor uPD78058GC-902 (X13-, IC1)

6-1 Microprocessor periphery block diagram



KR-V999D/1090VR
CIRCUIT DESCRIPTION

6-2. Terminal explanation

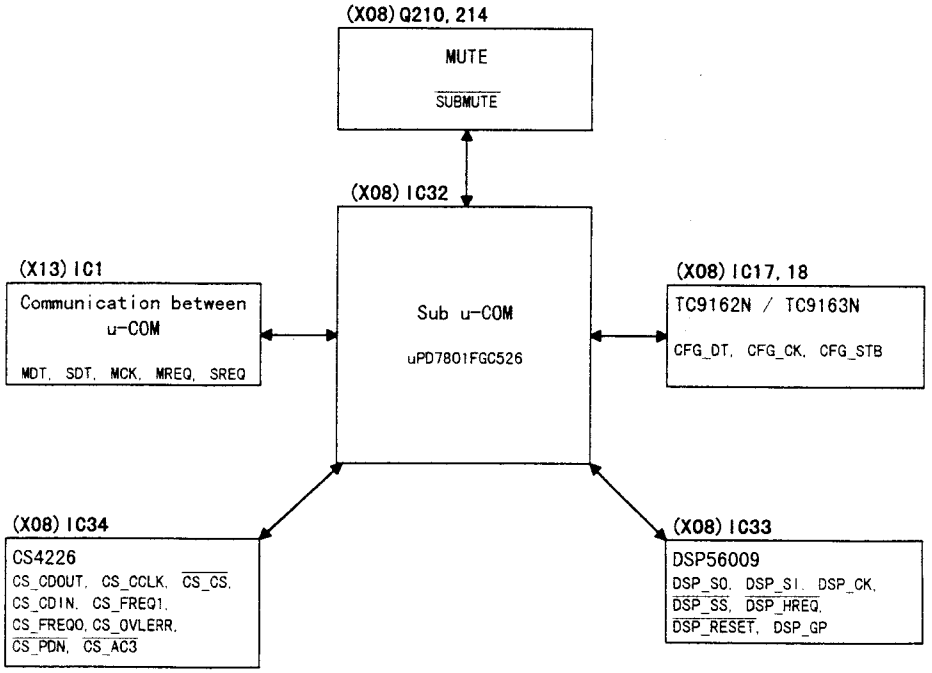
Pin No.	Name	I/O	Description
1	RELAY_TR	O	Relay Secondary side of the transformer
2	RELAY_HP	O	Relay HEAD PHONE
3	PROTECT	I	Protection input
4	AVSS	—	GND for A/D
5	SUB_RESET	O	Sub microprocessor RESET
6	OSD_CS1	O	MB90089 CS1 for NTSC
7	AVREF1	—	Unuse
8	8/16	I	Serial 8/16 bit judgement terminals
9	OSD_SIN	O	MB90089 SIN
10	OSD_SCLK	O	MB90089 SCLK
11	SUB_SI	I	Control microprocessor communication SI
12	SUB_SO	O	Control microprocessor communication SO
13	SUB_CLK	O	Control microprocessor CLK
14	SUB_REQ1	O	Control microprocessor REQ1
15	SUB_REQ2	I	Control microprocessor REQ2
16	FL_DOUT	I	UPD16311 DOUT (key scan)
17	FL_DIN	O	UPD16311 DIN (display data output)
18	FL_CLK	O	uPD16311 CLK
19	999D/888D	I	KR-V999D/888D switching switch
20,21	SEL_1,SEL_2	I	Selector encoder input 1 input 2
22,23	VOL_1, VOL_2	I	Volume encoder input 1 input 2
24 - 26	TSW_0 - TSW_2	I	Destination switching switch 0 - switch 2
27	FL_STB	O	uPD16311 STB
28	VSEL_DATA	O	NJU3713 (expansion IC for picture selector) DATA
29	VSEL_CLK	O	NJU3713 (expansion IC for picture selector) CLK
30	VSEL_STB	O	NJU3713 (expansion IC for picture selector) STB
31	—	—	Unuse
32	S_SW	I	S detection
33	VSS	—	
34	OSD_CS2	O	MB90089 CS2 for PAL
35	NTSC_PAL_OUT	O	NTSC/PAL switching output
36	NTSC_PAL_IN	I	NTSC/PAL switching input
37	LOUDNESS	O	LOUDNESS control
38,39	—	—	Unuse
40	SEL_STB1	O	NJU731x STB for ROOM A
41	SEL_STB2	O	NJU731x STB for ROOM B
42	VOL_CE	O	TC9412 CE
43	COM_DATA	O	TC916x.TC9412 DATA
44	COM_CLK	O	TC916x.TC9412 CLK
45	SBUSY	I/O	Serial BUSY
46	SDATA	I/O	Serial DATA
47	MUTE_A	O	ROOM A mute
48	MUTE_B	O	ROOM B mute
49	SYNC_DET	I	OSD picture synchronous signal detection
50	V_MUTE	O	VIDEO MUTE

Pin No.	Name	I/O	Description
51	-20dB_MUTE	O	-20dB MUTE
52	EXT_OUT	O	EXTERNAL OUT
53	T_MUTE	O	Tuner mute
54	PLL_CLK	O	LC72131 CLK
55	PLL_DATA	O	LC72131 DATA
56	PLL_CE	O	LC72131 CE
57	SD	I	SD input
58	STEREO	I	STEREO input
59	PLL_DO	I	LC72131 DO
60	RESET	I	Reset
61	REMOCON	I	Remote controller input
62	TSW_3	I	Destination switching switch 3 (CH, SPACE)
63	RDS_DATA	I	RDS DATA
64	RDS_CLK	I	RDS CLK
65	TSW_4	I	Destination switching switch 4
66	—	—	Unuse
67	CE	I	Backup
68	VDD	—	Power supply+5V
69	X2	—	System clock connection
70	X1	I	System clock connection
71 - 73	—	—	Unuse
74	AVDD	—	Analogue power supply for A/D
75	AVREF0	—	Standard voltage input for A/D
76	RDS_SLEVEL	I	RDS S_LEVEL
77	RELAY_POWER	O	Relay POWER
78	RELAY_A	O	Relay ROOM A
79	RELAY_B	O	Relay ROOM B
80	RELAY_CS	O	Relay CENTER SURROUND

KR-V999D/1090VR
CIRCUIT DESCRIPTION

7. Sub-microprocessor uPD7801FGC526 (X08-: IC32)

7-1 Microprocessor periphery block diagram



7-2 Terminal explanation (submicroprocessor)

PIN NO.	NAME	I/O	DESCRIPTION
1	DSP_SS	O	DSP56009 SS
2	DSP_HREQ	I	DSP56009 HREQ
3	DSP_RESET	O	DSP56009 RESET
4,5	NC	I	UNUSE
6	CFG_DT	O	TC9162N/TC9163N DATA
7	CFG_CK	O	TC9162N/TC9163N CLOCK
8	CFG_STB	O	TC9162N//TC9163N STROBE
9	VSS		GND
10-12	NC	O	UNUSE
13	AD_SEL	O	ST.PCM/AC3 2ch DOWN MIX :L ELSE : H
14-17	NC	O	UNUSE
18	CS_CDOUT	I	CS4226 DATA IN
19	CS_CCLK	O	CS4226 CLOCK
20	CS_CS	O	CS4226 CHIP SELECT

PIN NO.	NAME	I/O	DESCRIPTION
21	CS_CDIN	O	CS4226 DATA OUT
22	CS_FREQ1	I	CS4226 FS CHECK
23	CS_FREQ0	I	CS4226 FS CHECK
24	VSS		GND
25	CS_PDN	O	CS4226 POWER DOWN PORT
26	CS_AUDIO	I	CS4226 AUDIO
27-30	NC	I	UNUSE
31	CS_OVL/ERR	I	CS4226 OVER LOAD//ERROR DETECT
32	SUBMUTE	O	ANALOG MUTE CONTROL
33,34	NC	I	UNUSE
35	RESET	I	u-COM RESET
36	CS_AC3	I	CS4226 AC3
37-39	NC	I	UNUSE
40	VDD		+5V
41	X2	O	CERAMICS
42	X1	I	CERAMICS
43	IC(VPP)		GND
44	XT2		OPEN
45	NC	I	+5V
46	AVSS		GND
47,48	NC	I	UNUSE
49	TEST_T	O	TEST TONE OFF/ON ON : LOW / OFF : HIGH
50-53	NC	I	UNUSE
54	DSP_GP	O	DSP56009 GP10PIN
55	AVDD		+5V
56	AVREF	I	GND
57	MDT	I	Communication between u-COM MASTER DATA
58	SDT	O	Communication between u-COM SLAVE DATA
59	MCK	I	Communication between u-COM MASTER CLOCK
60	MREQ	I	Communication between u-COM MASTER REQUEST
61	SREQ	O	Communication between u-COM SLAVE REQUEST
62	DSP_SQ	I	DSP56009 DATA IN
63	DSP_SI	O	DSP56009 DATA OUT
64	DSP_CK	O	DSP56009 CLOCK

Key matrix table

	⑬ KS0	⑫ KS1	⑪ KS2	⑩ KS3
⑮ KS1	———	DOLBY PROLOGIC	DOLBY 3 STEREO	DOLBY AC-3
⑯ KS2	STEREO	DSP	SOURCE DIRECT	———
⑰ KS3	LOUDNESS	MUTE	DIMMER	TAPE2
⑱ KS4	TUNING DOWN	0	9	+10
⑲ KS5	8	TUNING UP	6	7
⑳ KS6	BAND	AUTO / MANUAL	4	5
㉑ KS7	———	PTY	RDS DISPLAY	TA / NEWS / INFO.
㉒ KS8	SPEAKER A	MEMORY	2	3
㉓ KS9	POWER	SPEAKER B	1	DIRECT

※ The number inside ○ is a terminal number of IC101(X14).

KR-V999D/1090VR
CIRCUIT DESCRIPTION

8. Control list for the switch and the port

(1) Sound system selector ROOM A (0 : SW OFF / 1 : SW ON)

		X25(IC9)	(X08)IC71						(X08)IC72						(X25)IC8					
		② ㉗	㉗	㉖	㉓	㉒	⑲	⑱	㉗	㉖	㉕	㉓	㉒	㉑	② ㉗	③ ㉖	④ ㉕	⑤ ㉔	⑦ ㉒	⑧ ㉑
TAPE 2 OFF	TUNER	1	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	1	0
	PHONO	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	1	0
	CD	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	1	0
	TAPE1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	0
	VIDEO1	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
	VIDEO2	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0
	VIDEO3	1	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	1	0
	VIDEO4	1	0	0	0	0	1	1	0	1	0	0	1	0	0	0	0	0	1	0
	AV AUX	1	0	0	0	0	1	1	0	0	1	0	0	1	0	0	0	0	1	0
TAPE 2 ON	TUNER	1	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	1
	PHONO	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	1
	CD	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1
	TAPE1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1
	VIDEO1	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	VIDEO2	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	VIDEO3	1	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	1
	VIDEO4	1	0	0	0	0	1	1	0	1	0	0	1	0	0	0	0	0	0	1
	AV AUX	1	0	0	0	0	1	1	0	0	1	0	0	1	0	0	0	0	0	1

(2) Sound system selector ROOM B (0 : SW OFF / 1 : SW ON)

	(X08)IC71						(X08)IC72						(X25)IC27				
	②	③	⑥	⑦	⑩	⑪	②	③	④	⑥	⑦	⑧	② ㉗	③ ㉖	④ ㉕	⑥ ㉓	⑧ ㉑
TUNER	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0
PHONO	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0
CD	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0
TAPE1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0
VIDEO1	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0
VIDEO2	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
VIDEO3	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0
VIDEO4	0	0	0	0	1	1	0	1	0	0	1	0	0	0	0	0	0
AV AUX	0	0	0	0	1	1	0	0	1	0	0	1	0	0	0	0	0

(3) Picture system selector ROOM A (0 : L / 1 : H)

	(X13)IC7				
	⑭	⑮	⑯	⑰	①
VIDEO1	0	0	0	0	0
VIDEO2	1	0	1	0	0
VIDEO3	1	1	1	1	1
VIDEO4	1	1	1	1	0
AV AUX	0	1	0	1	0

CIRCUIT DESCRIPTION

(4) Picture system selector ROOM B (0 : L / 1 : H)

VIDEO OUT	(X13)IC7 ②	③	④
VIDEO1	0	0	0
VIDEO2	1	0	0
VIDEO3	0	1	0
VIDEO4	0	0	1
AV AUX	1	1	0

(5) Relay switching (0 : RELAY OFF / 1 : RELAY ON)

SPEAKER A	SPEAKER B	SURROUND	(X07)RELAY A(K2)	B(K3)	CS(K4) (K5)	TR(K6)	HP(K7)
OFF	OFF	OFF	0	0	0	1	1
ON	OFF	OFF	1	0	0	1	0
ON	OFF	ON	1	0	1	1	0
OFF	ON	OFF	0	1	0	1	0
ON	ON	OFF	1	1	0	0	0

(6) OSD switching (0 : L / 1 : H)

S_SW	OSD A/B	(X13)IC7 ⑥	⑦	⑧
L	A	0	0	1
L	B	0	1	0
H	A	1	1	1
H	B	0	1	0

(7) Input level switching (0 : SW OFF / 1 : SW ON)

	(X25)IC8 ⑩ ⑲	⑪ ⑱
INPUT LEVEL ATT 0dB	1	0
INPUT LEVEL ATT -3dB	0	0
INPUT LEVEL ATT -6dB	0	1

(8) Digital REC switching (0 : SW OFF / 1 : SW ON)

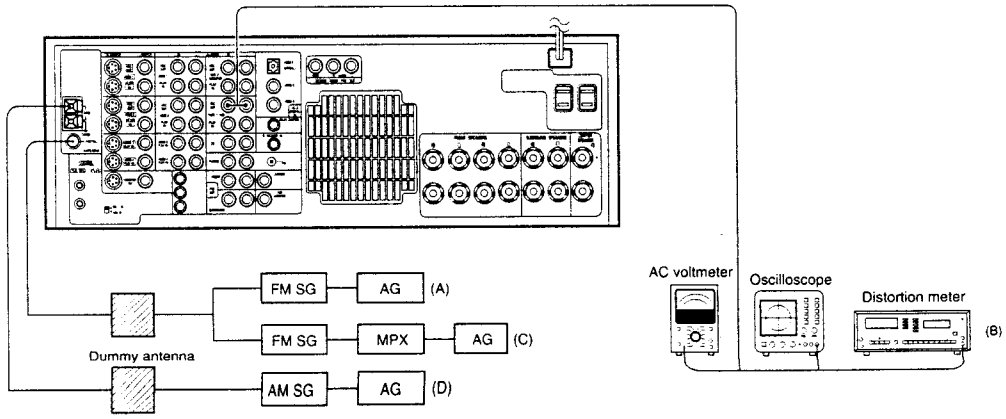
	(X25)IC9 ③ ㉖	⑤ ㉔	⑥ ㉓	⑧ ㉑	⑨ ⑳
DIGITAL REC	0	1	1	0	0
Except for DIGITAL REC	1	0	0	1	1

KR-V999D/1090VR

ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
FM SECTION (E,T type)		SELECTOR : FM					
1	DISCRIMINATOR L31 ⟷ L32 (E,T,Q only)	(A) 98.0MHz 1kHz,±40kHz dev. 60dBμ(ANT input)	Connect a DC voltmeter between TP3 of CN2 (X05-)	AUTO 98.0MHz	L31 (X05-)	0V	(a)
					L32 (X05-)	Minimum distortion	
2	DISTORTION (STEREO)	(C) 98.0MHz 1kHz, ±40kHz dev. Pilot: ±6kHz dev. 60dBμ(ANT input)	(B)	AUTO 98.0MHz	IFT (W02-)	Minimum distortion	(a)
AUDIO SECTION		SPEAKER : A	PREOUT : OFF		PROLOGIC : ON		
<1>	IDLE CURRENT	—	Connect a DC voltmeter across CP1 or CN15(L) CN16(R) CN9(CENTER) CN20(SR) or CN17(SL) (X07-)	Volume:0	VR1(L) VR2(R) VR3(SL) VR4(SR) VR5(CENTER) (X07-)	13mV	
<2>	ON SCREEN Color burst frequency	After take a single PCB, conner supply between TP(+5V) and GND (x25-)(B/2)	Connect a frequency counter between port 10 (check round of HSYNC) of IC204(or 206) and GND (X25-)(B/2)	After power ON (stand-by), input Low CS(24pin) of IC204(or 206) four time(cancel inner reset), then input Low TEST(24pin)	TC201(NTSC) TC1(X14-) TC202(PAL) (X25-)	(TC201) 3.57954MHz (TC202) 4.433619MHz	

(a)



KR-V999D/1090VR

WIRING DIAGRAM

1090VR	(K,P) : X05-4680-11
KR-V999D	(M,C) : X05-4670-20 (Y) : X05-4682-91 (T,E) : X05-4682-71 (Q) : X05-4683-81

TUNER UNIT
(X05-)

FM 75 Ω GND
FM 300 Ω
AM ANT
J1
CN1
WH1
E1
E4
WH3
E3

(X13-) (C/6)
J301
SYSTEM CONTROL

(X25-588X-XX) (A/2)
J1
AUDIO
REC L R
TAPE2 PLAY L R
REC L R
TAPE1 PLAY L R
J2
CD L R
PHONO L R
J3
ROOM A)
Cch
Lch
FRONT Rch
PREOUT
J4
SWch
Lch
SURROUND Rch
CN1
CN2
CN103
CN104

(X25-) 1090VR	(K,P) : 0-10
KR-V999D	(M,C,Y) : 0-21 (T,E,Q) : 2-71

CN110 CN109 CN108 CN107

CN106
CN105
E2
WH2
CN111
E5
P1

(X13-747X-XX) (A/6)

1090VR	(K,P) : 0-10
KR-V999D	(M,C) : 0-21 (T,E) : 2-71 (Y) : 2-91 (Q) : 3-81

SURROUND UNIT
(X08-273X-XX) (A/2)
J3
(DIGITAL INPUT)
VIDEO 4
COAX
VIDEO 3
A1
VIDEO 2 OPT.
CN101
CN102
CN1
CN2
J1
RELAY CONTROL (DC12V/40mA)
J2
IR RECEIVER IN (DC 5V/10mA)

(X08-)

1090VR	(K,P) : 0-10
KR-V999D	(T,E,Q) : 2-71 (M,C,Y) : 2-91

REPEATER OUT 1
REPEATER OUT 2
REPEATER OUT 3
J73
J74
J75

(X25-) (B/2)
CN201
CN202
J201
VIDEO3 PLAY IN
VIDEO4 PLAY IN
MONITOR OUT
E1
WH1
J202 (VIDEO)
REC OUT
VIDEO1
PLAY IN
REC OUT
VIDEO2
PLAY IN

(X08-) (B/2)
CN52
CN51
J71 (AUDIO)
Lch Rch REC OUT
VIDEO1
Lch Rch PLAY IN
Lch Rch REC OUT
VIDEO2
J72
Lch Rch PLAY IN
Lch Rch VIDEO3 PLAY IN
Lch Rch VIDEO4 PLAY IN
WH14

(X14-) (C/5)
CN201
CN202
J202 (S-VIDEO)
REC OUT
VIDEO 1 PLAY IN
REC OUT
J203
VIDEO 2 PLAY IN
VIDEO 3 PLAY IN
VIDEO 4 PLAY IN
J201
MONITOR OUT
S201
SL16
XS8/SL16 SW
XS8

1090VR	(K,P) : 0-10
KR-V999D	(M) : 0-21 (T) : 0-51 (E) : 2-71 (Y) : 2-91 (C) : 3-01 (Q) : 3-81

MAIN AMP UNIT
(X07-290X-XX) (A/5)
J2
(ROOM A) Lch Rch FRONT A SP. (4-16 Ω)
(ROOM B) Lch Rch FRONT B SP (4-16 Ω)
J3
(ROOM A) Lch Rch SURROUND SP. (4-16 Ω)
Cch/CENTER SP. (4-16 Ω)
CN19 Cch
CN17 SLch
IDLE.T.P.
CN18 SRch
CN16 Rch
CN15 Lch
IDLE.T.P.
E9
E8
E7
WH18 RED
WH19 YEL
WH20 BLK
WH21 WHT
WH22 GRY
CN7
P1

(X14-) (E/5)
(ROOM B)
J301
Lch 1
AUDIO Rch 2
SECOND ROOM PRE OUT
J302
VIDEO OUT
WH1
CN305
CN303
CN304
CN301
CN302
WH13
WH14
WH17
WH16
E2
E3
E6
E5

(X14-) (D/5)
CN8
WH3
E4
J3
P2
WH23 TS2 105℃
WHT BLK
OFF <105℃ ON
WH24 TS1 65℃
WHT BLK
OFF <65℃ ON
WH25
FAN MOTOR
M
CN1
CN6

DISPLAY UNIT
(X14-430X-XX) (A/5)

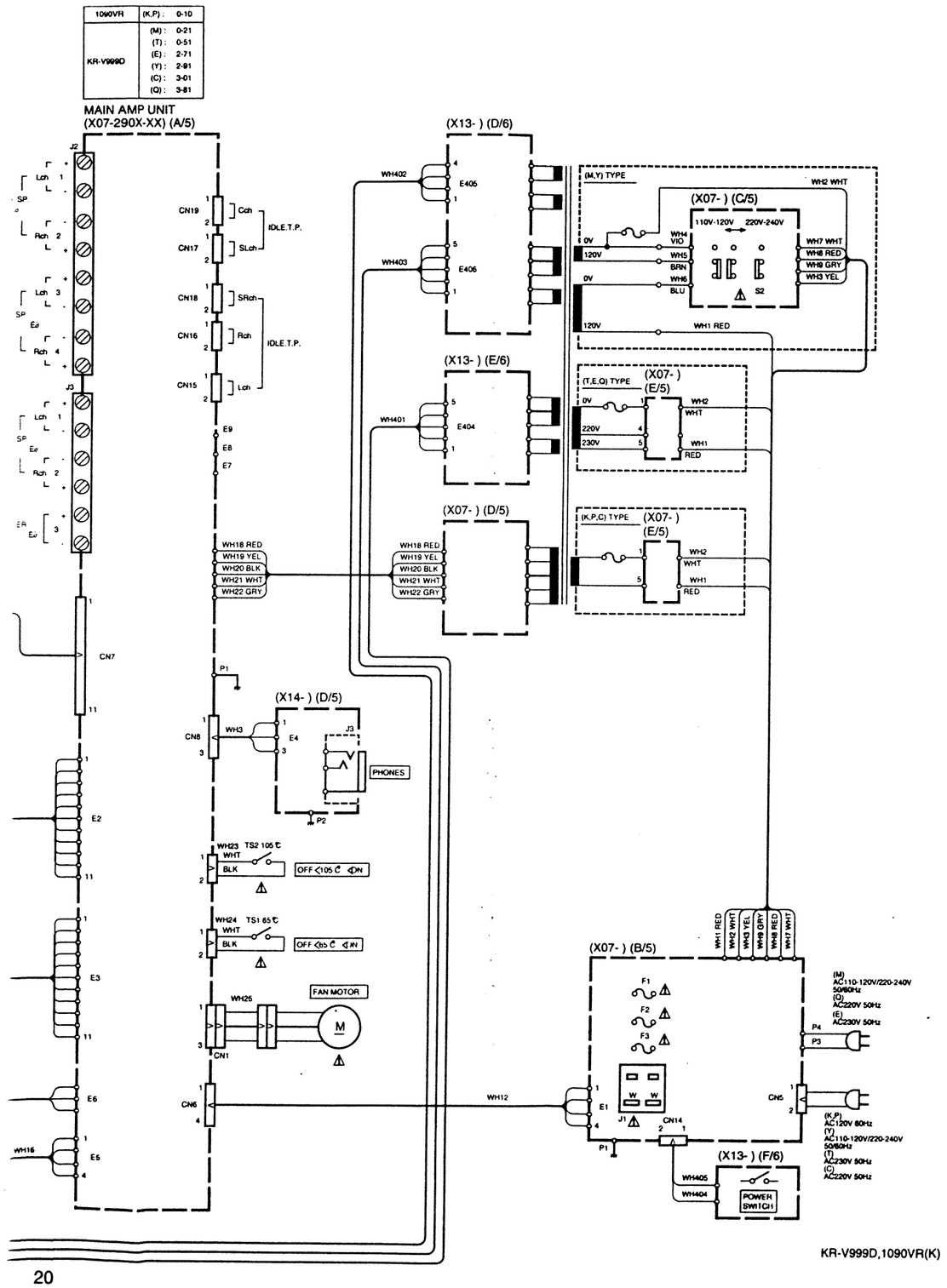
1090VR	(K,P) : 0-10
KR-V999D	(Y) : 0-10 (M,C) : 0-21 (T,E,Q) : 2-71

CN101
E1
WH1
E3
WH2

(X14-) (B/5)
J1
1-Lch
2-Rch
3-VIDEO
AV AUX (FRONT)
J2
S-VIDEO
P1
E1

(X13-) (B/6)
CN401
CN403
CN402
E401
E403
E402
WH401
WH403
WH402
WH16

1090VR	(K,P) : 0-10
KR-V999D	(M) : 0-21 (T) : 0-51 (E) : 2-71 (Y) : 2-91 (C) : 3-01 (Q) : 3-81

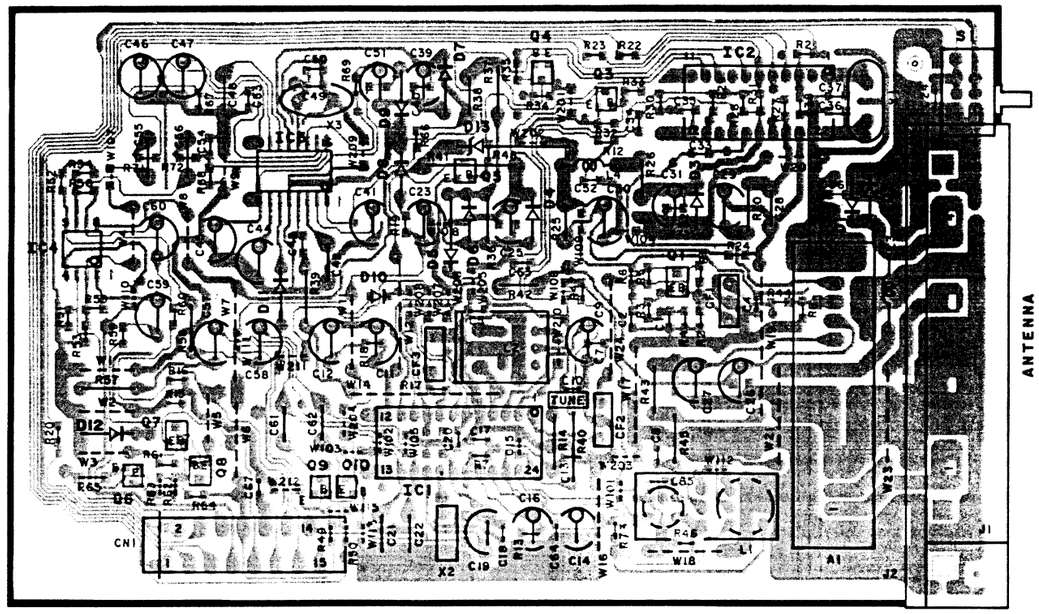


KR-V999D,1090VR(K)

PC BOARD(Component side view)

TUNER UNIT(X05-4670-20); CM(KR-V999D)

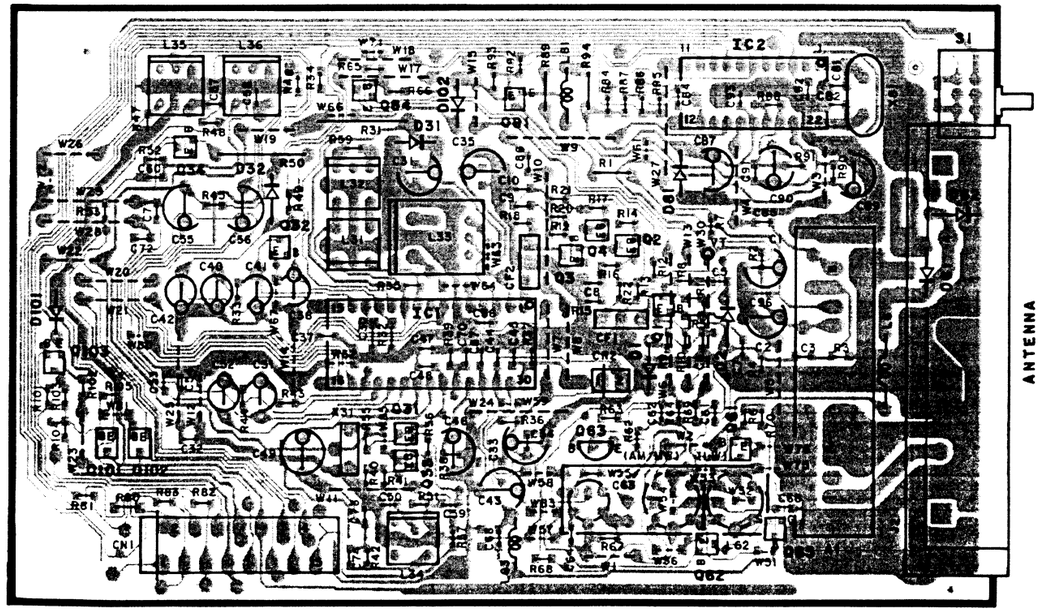
(X05-4670-20) J70-0959-11



TUNER UNIT(X05-468X-XX)

(X05-468X-XX) J70-0960-21

0-11: KP(1090VR)
2-71: TE(KR-V999D)
3-81: Q(KR-V999D)
2-91: Y(1090VR)



SURROUND UNIT(X08-273X-XX)

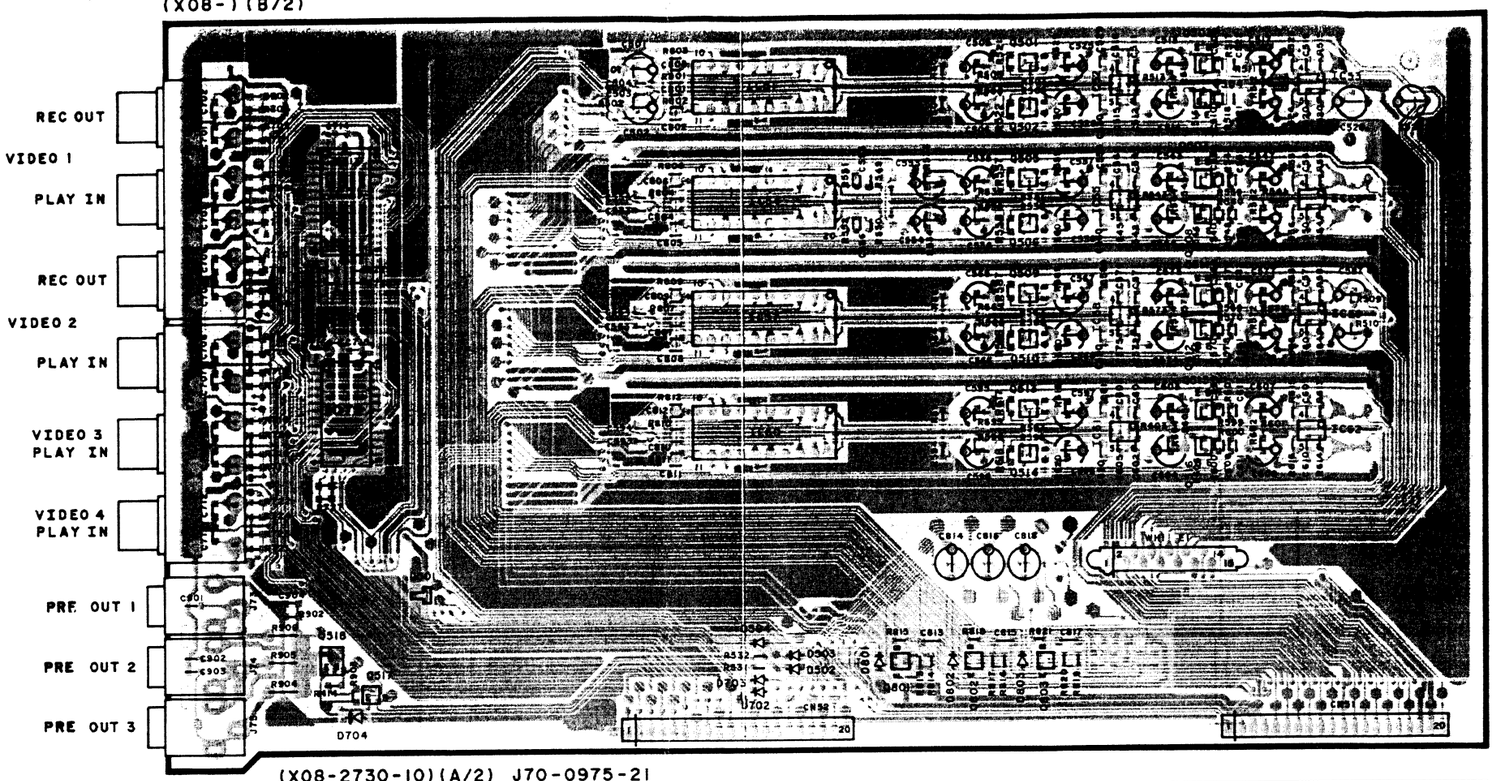
0-10: KP(1090VR)

2-71: EQT(KR-V999D)

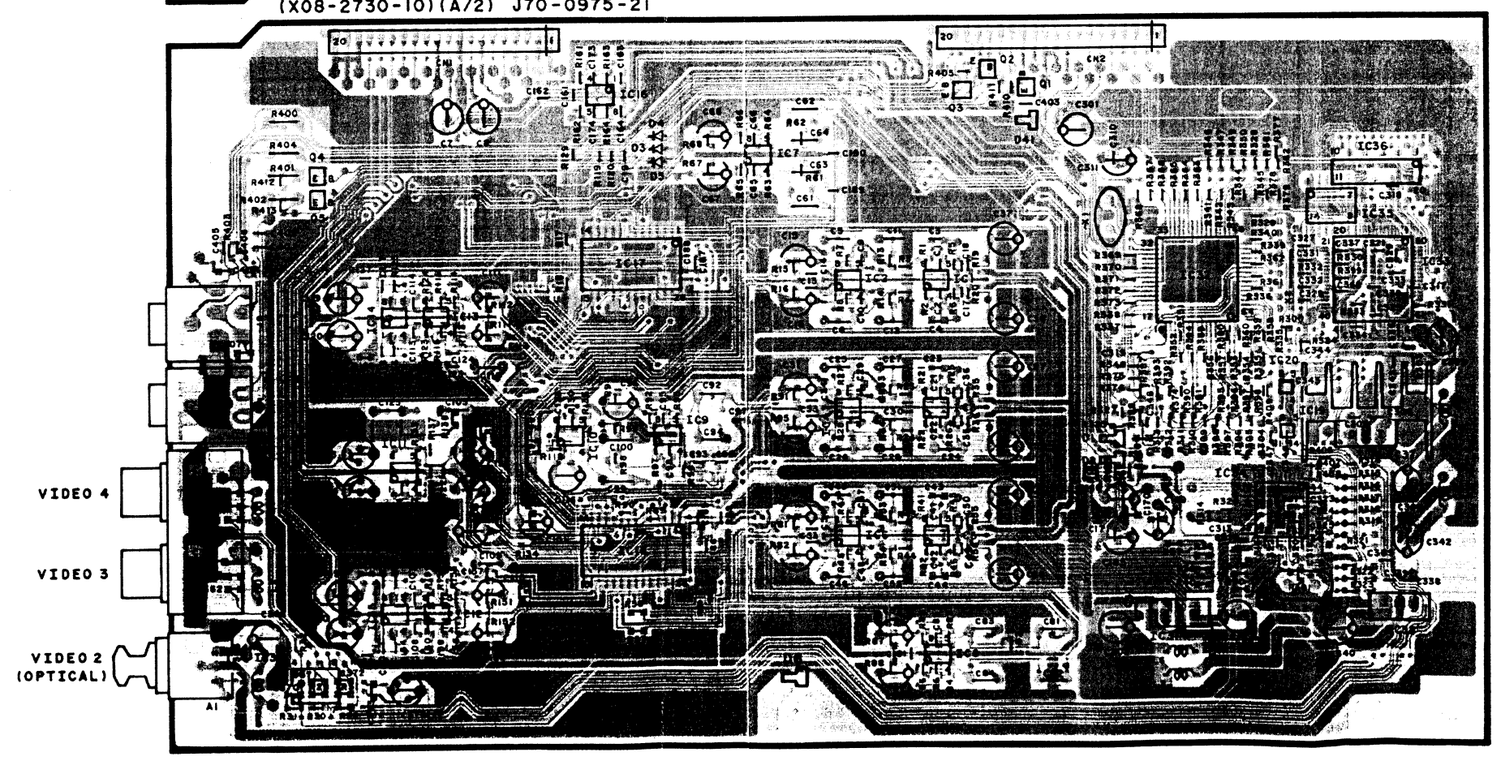
2-91: Y(1090VR)

CM(KR-V999D)

(X08-)(B/2)



(X08-2730-10)(A/2) J70-0975-21



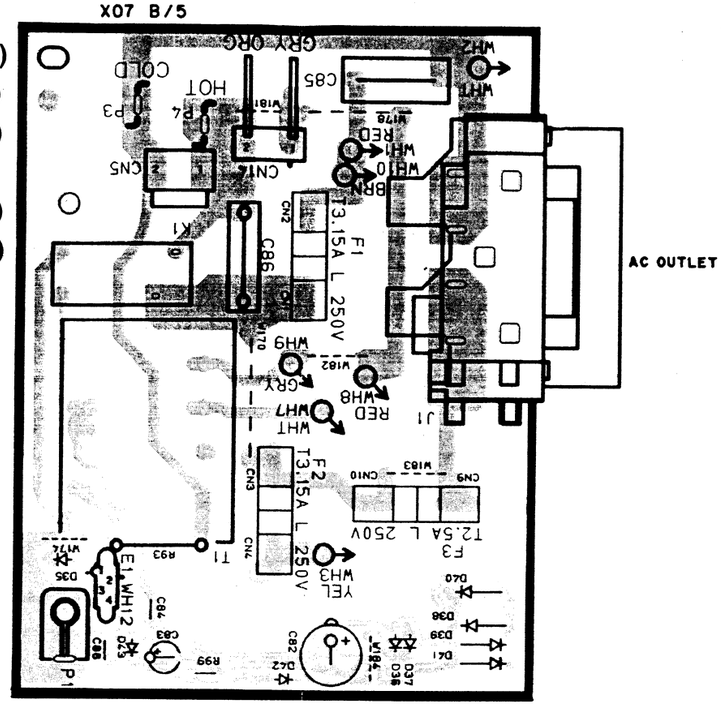
Refer to the schematic diagram for the value of resistors and capacitors.

PC BOARD(Component side view)

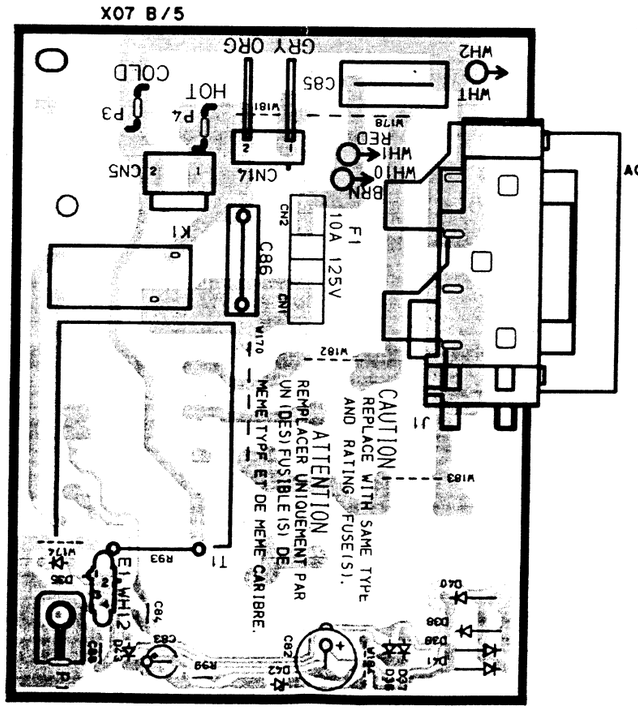
POWER AMPLIFIER UNIT(X07-290X-XX)

0-10: KP(1090VR)
0-21: M(KR-V999D)
0-51: T(KR-V999D)
2-71: E(KR-V999D)
2-91: Y(1090VR)
3-01: C(KR-V999D)
3-81: Q(KR-V999D)

X07 B/5



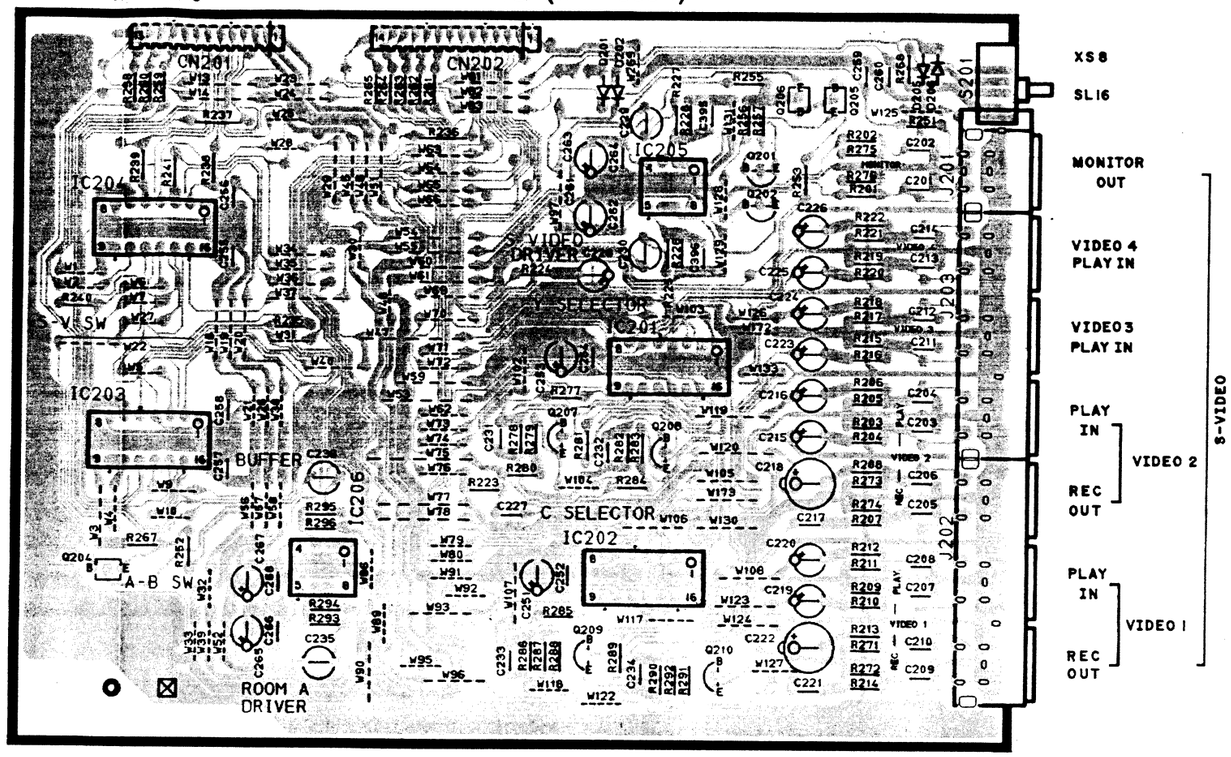
X07 B/5



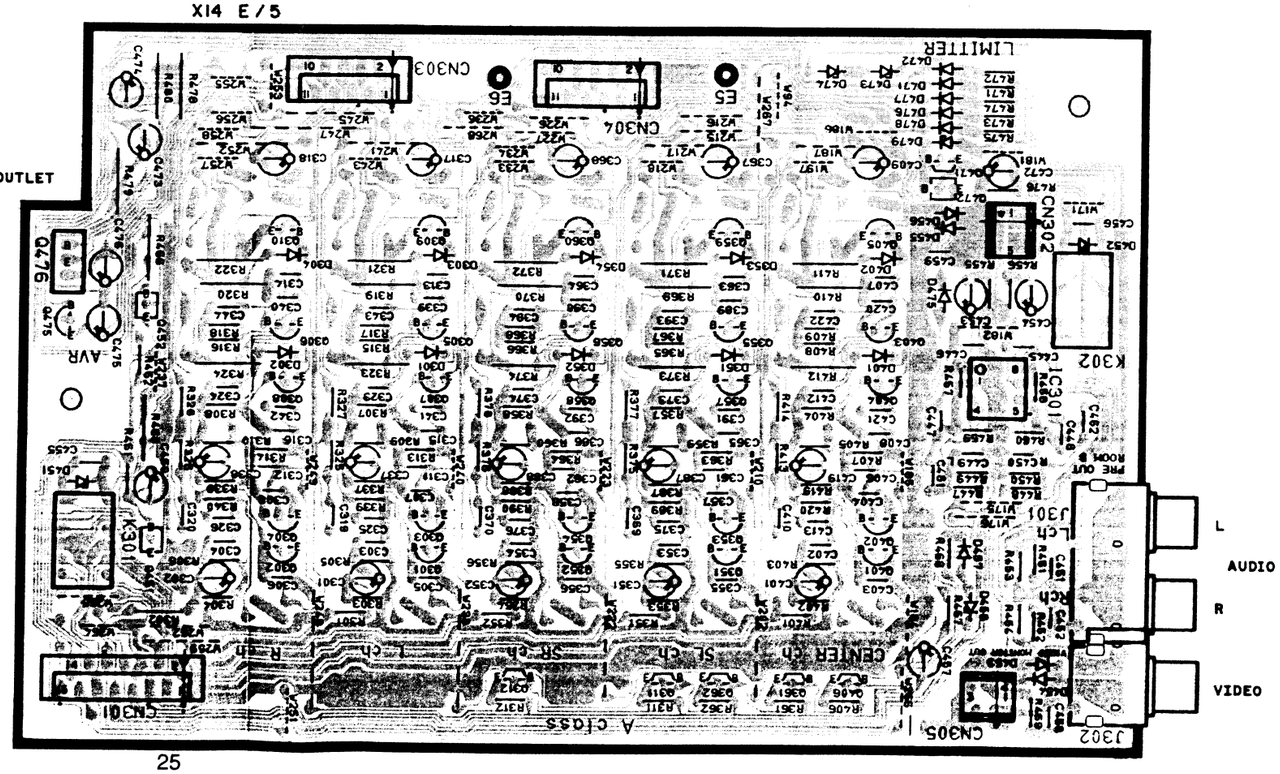
DISPLAY UNIT (X14-430X-XX)

0-10: KPY(only 1090VR)
0-21: CM(KR-V999D)
2-71: EQT(KR-V999D)

XI4 C/5



XI4 E/5



Refer to the schematic diagram for the value of resistors and capacitors.

PC BOARD(Component side view)

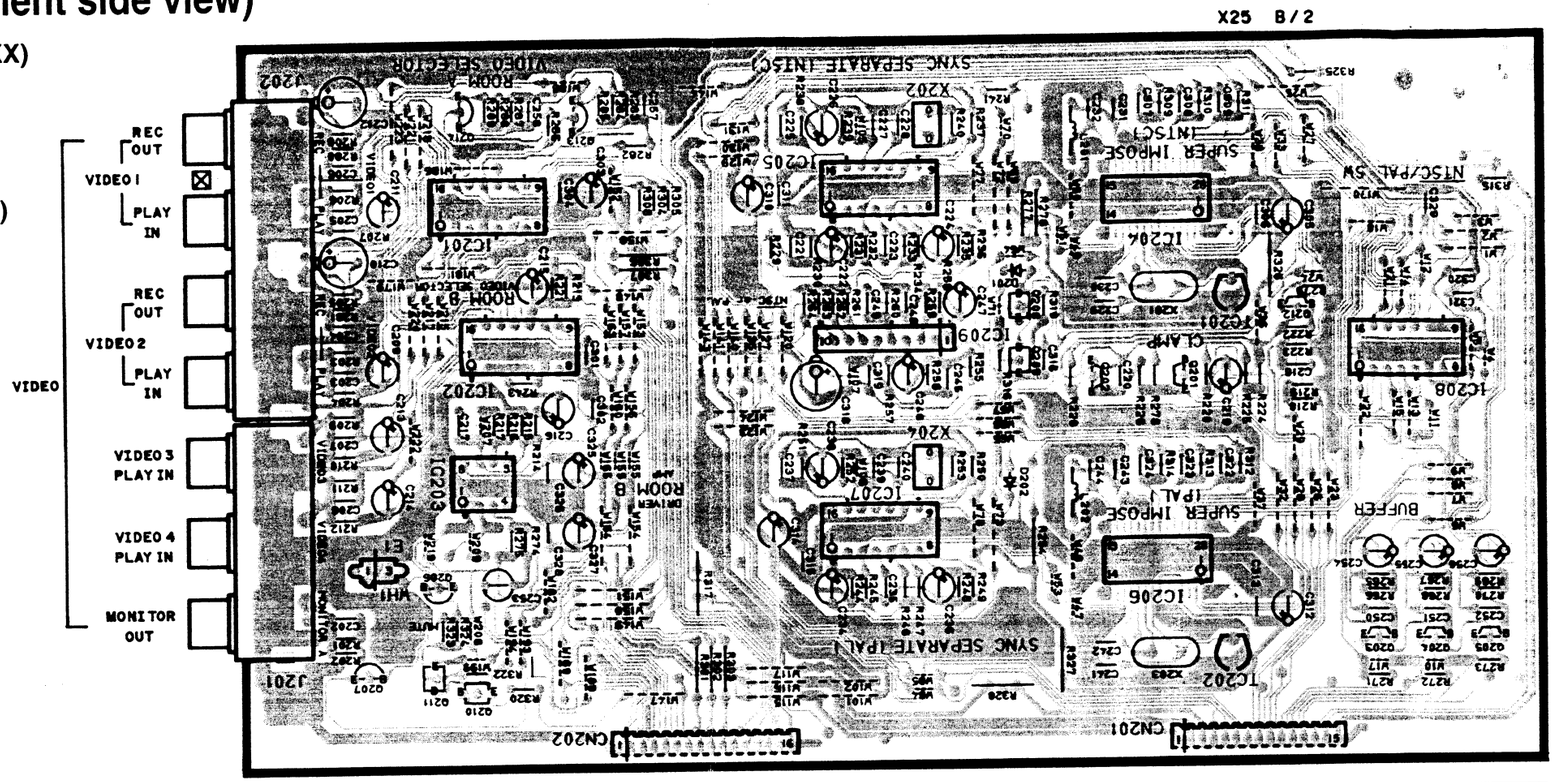
SWITCH UNIT(X25-588X-XX)

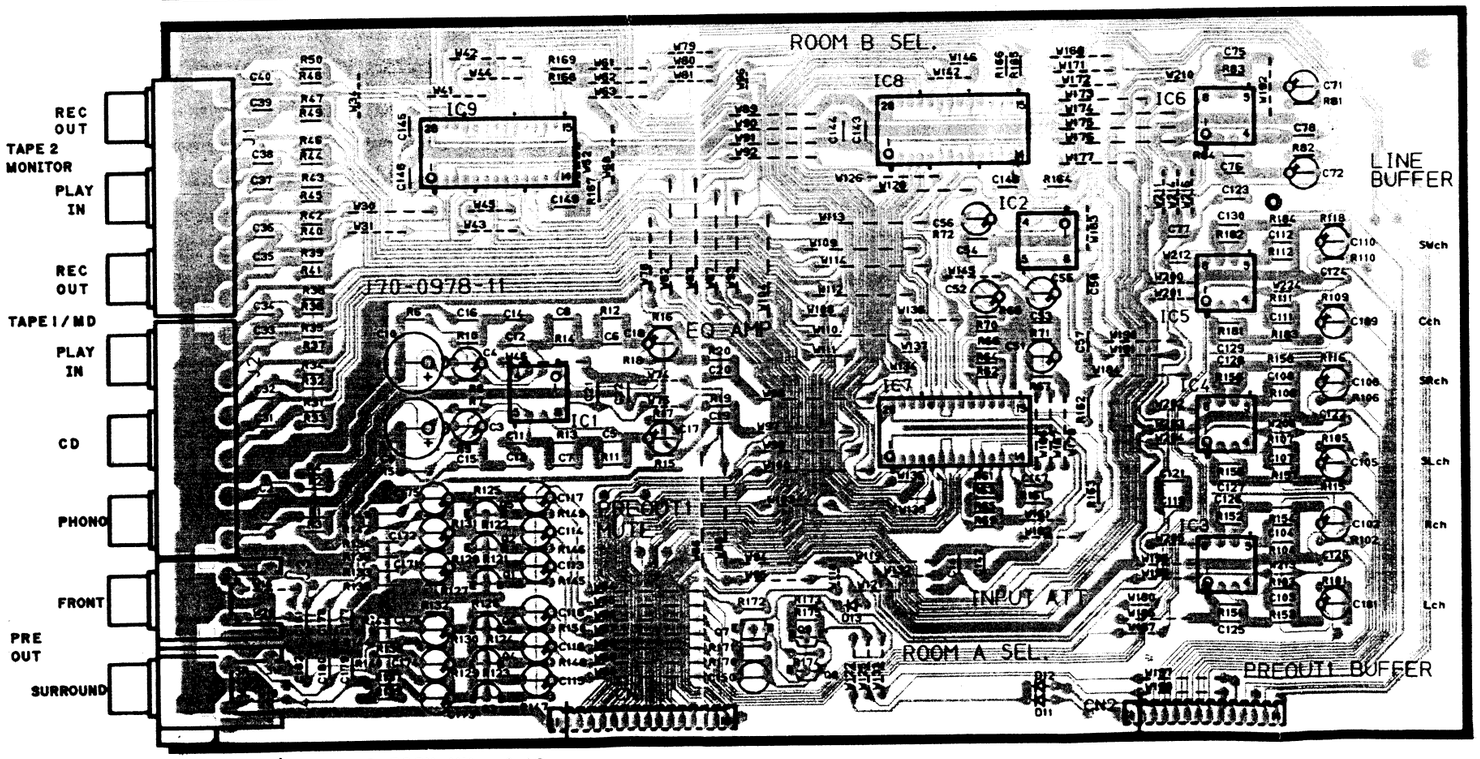
0-10: KP(1090VR)

0-21: Y(1090VR)

CM(KR-V999D)

2-71: EQT(KR-V999D)



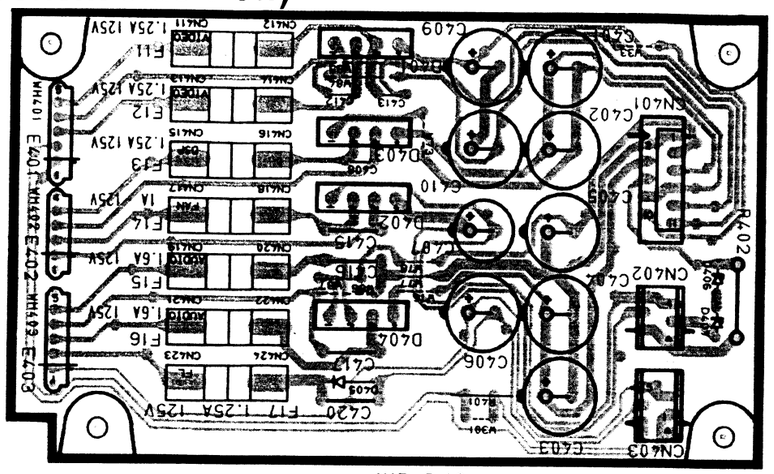


X25-588X-XX A/2

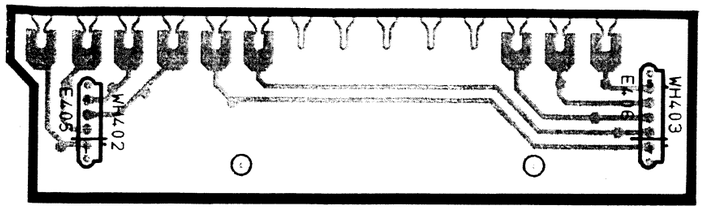
Refer to the schematic diagram for the value of resistors and capacitors.

PC BOARD(Component side view)

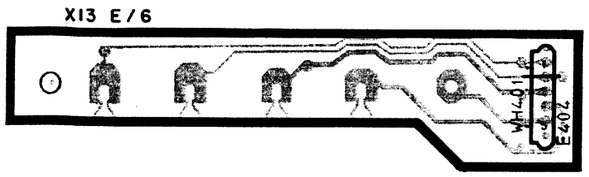
SUB CIRCUIT UNIT
(X13-747X-XX)
0-10: KP(1090)
0-21: C(KR-V999D)
2-71: ET(KR-V999D)
2-91: Y(1090VR)
3-81: Q(KR-V999D)



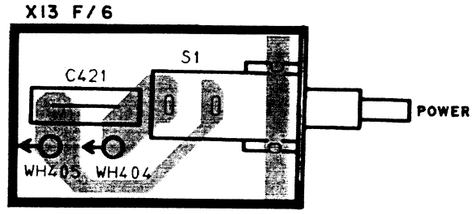
X13 B/6



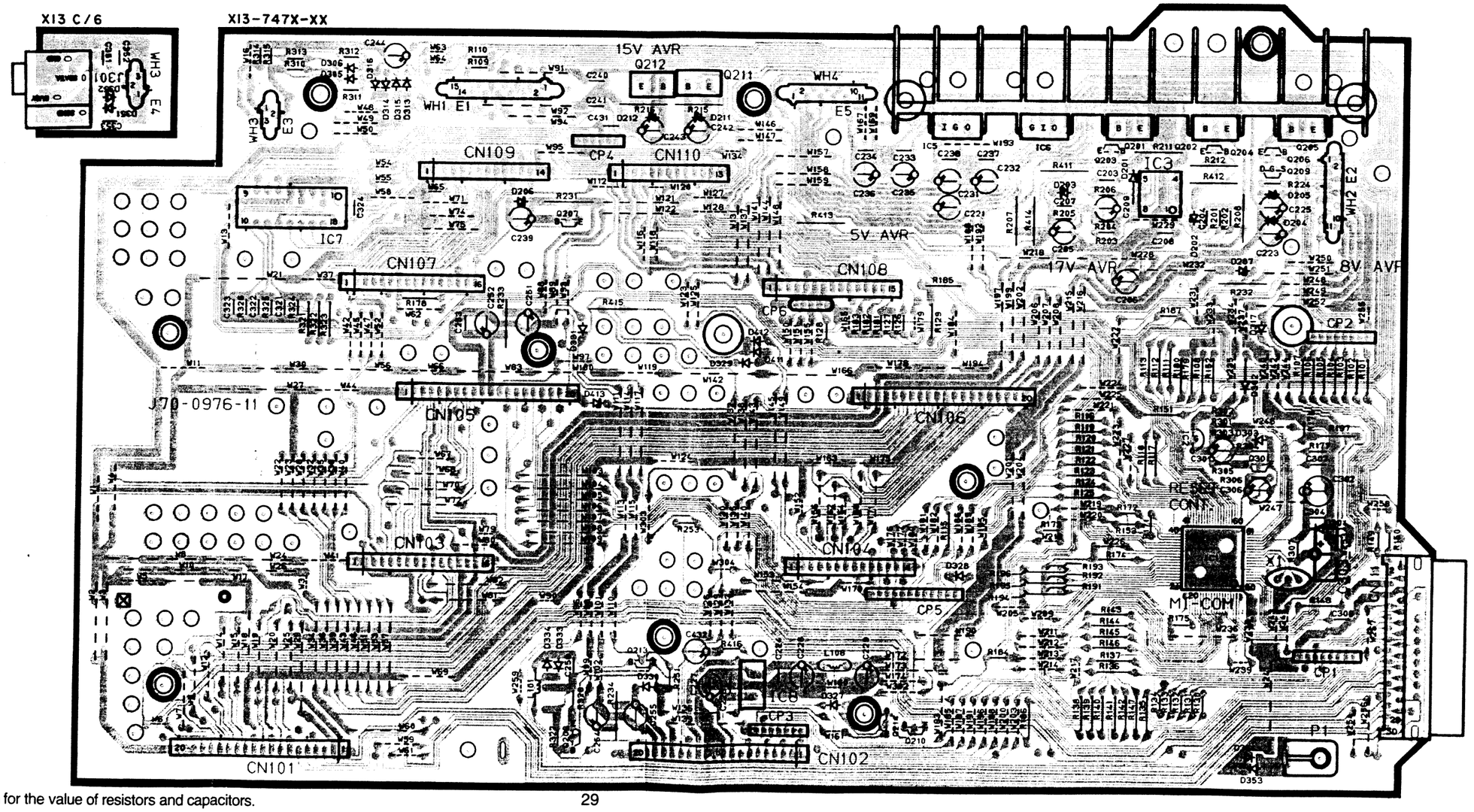
X13 D/6



X13 E/6



X13 F/6

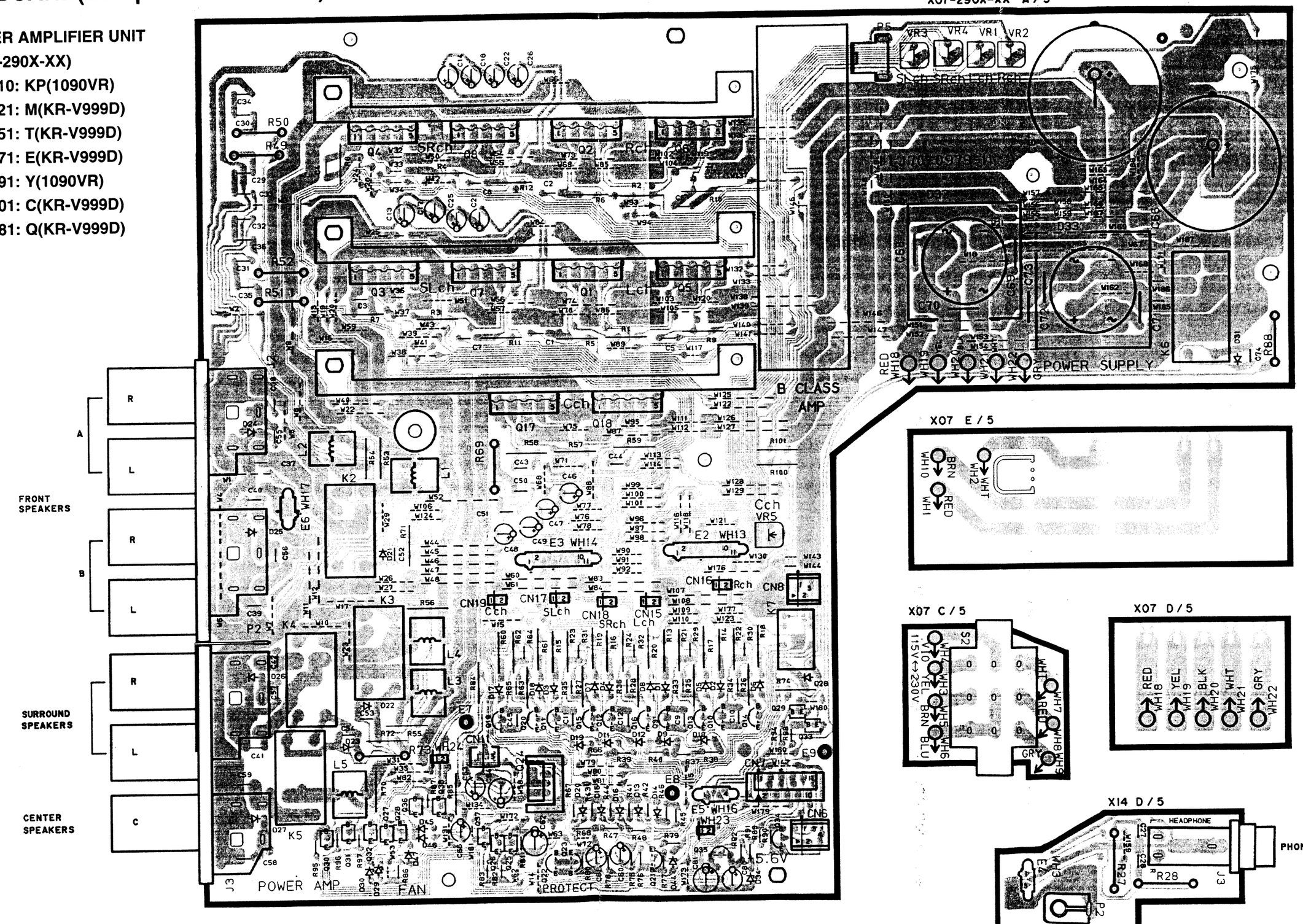


Refer to the schematic diagram for the value of resistors and capacitors.

PC BOARD(Component side view)

POWER AMPLIFIER UNIT
(X07-290X-XX)

- **0-10: KP(1090VR)**
- **0-21: M(KR-V999D)**
- **0-51: T(KR-V999D)**
- **2-71: E(KR-V999D)**
- **2-91: Y(1090VR)**
- **3-01: C(KR-V999D)**
- **3-81: Q(KR-V999D)**



Refer to the schematic diagram for the value of resistors and capacitors.

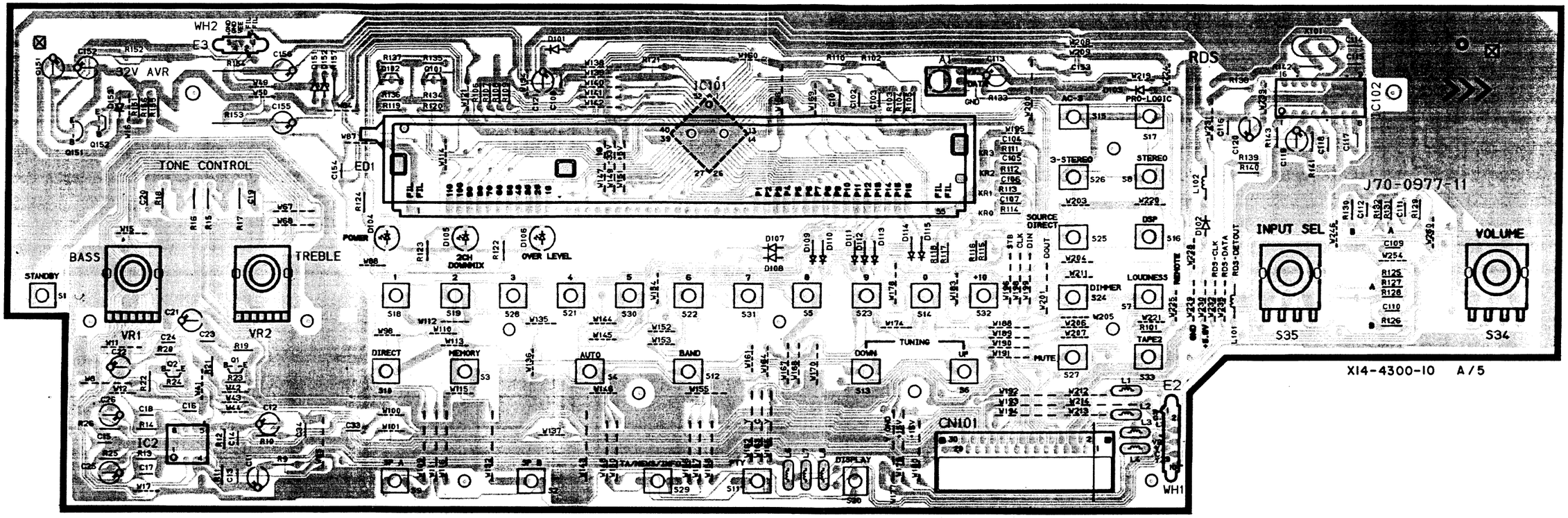
PC BOARD(Component side view)

DISPLAY UNIT(X14-430X-XX)

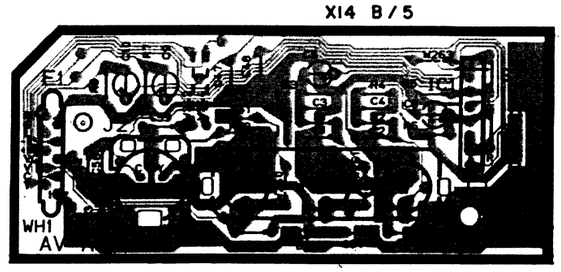
0-10: KPY(only 1090VR)

0-21: CM(KR-V999D)

2-71: EQT(KR-V999D)



X14 B/5



S-VIDEO VIDEO AUDIO
AV AUX

Refer to the schematic diagram for the value of resistors and capacitors.

(X05-4670-20) (C,M) TYPE

CAUTION: *For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).* ⚠ *indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.*

A1 (W02-2582-05) FM FRONT END

FET : 2SK302
TR1 : 2SC2714
TR2,3 : 2SC2413
D1-3 : HVU202 or 1T362

VT VOLTAGE

BAND	FREQ.	VT
FM	LF	1.8V
	HF	7.6V
AM	LF	1.4V
	HF	5.2V

LF: LOWEST FREQUENCY
HF: HIGHEST FREQUENCY

SIGNAL LINE
GND LINE
+B LINE

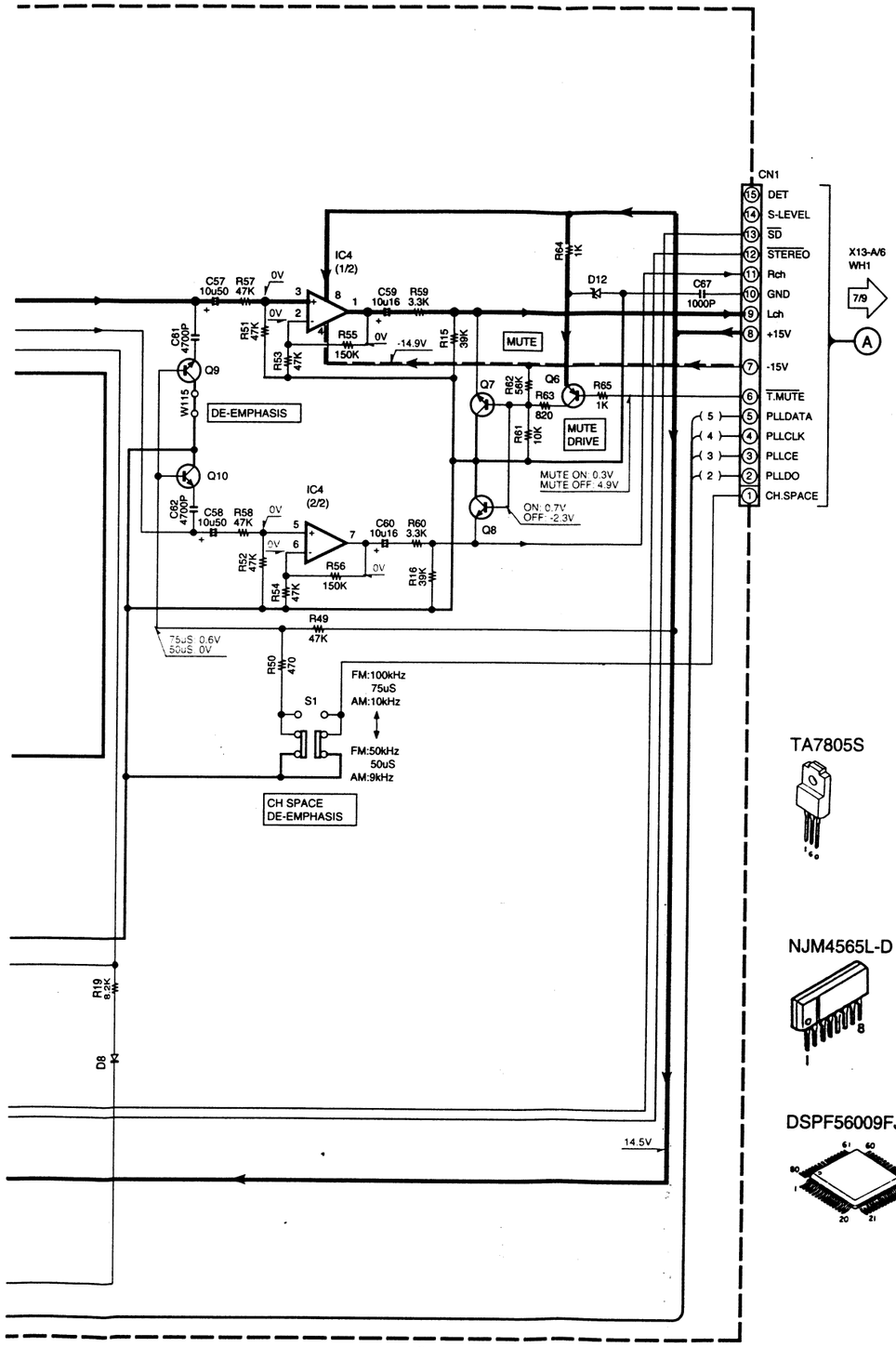
IC1 : LA1832
IC2 : LC72131
IC4 : NJM4565M

Q1 : 2SC2714(R,O)
Q3,6 : 2SA1576A(R,S) or 2SA1586(Y,GR)
Q5,9,10 : 2SC4081(R,S) or 2SC4116(Y,GR)
Q7,8 : 2SD1757K

D1,2,8 : 1SS133 or HSS104
D3,4 : RD5.1ES(B2) or HZS5.1N(B2)
D10 : MA111
D12 : RD3.3ES(B2) or HZS3.3N(B2)
D13 : RD2.7ES(B2) or HZS2.7N(B2)

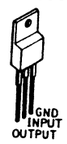
The DC voltage is an actual reading measured with a high impedance type voltmeter as the AM/FM signal generator is specified to the conditions as shown in the list below. The measurement value may vary depending on the measuring instruments used or on the product. The value shown in ( ) is actual reading measured in the AM mcde.

MODE	CARRIER	MODULATION		ANT INPUT
		FREQUENCY	DEVIATION	
FM	98MHz	1kHz	STEREO 67.5kHz 7.5kHz(Pilot)	60dB
AM	1000(999)kHz	400Hz	MONO 30% MOD	60dB



TA7805S

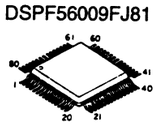
TA79005S



NJM4565L-D

LA1832

DSPF56009FJ81



LA7950

IC1 : LA1836
IC2 : LC72131

Q1,2,4,31-34 : 2SC4081(R,S) or 2SC4116(Y,GR)
Q3,81,103 : 2SA1578A(R,S) or 2SA1586(Y,GR)
Q101,102 : 2SD1757K

D1,2,32,61,62 : 1SS133 or HSS104
D31 : RD8.2ES(B2) or HZS8.2N(B2)
D81 : RD5.1ES(B2) or HZS5.1(B2)
D101 : RD3.3ES(B2) or HZS3.3N(B2)
D102 : RD2.7ES(B2) or HZS2.7N(B2)

KR-V999D,1090VR(C) (1/9)

KR-V999D/1090VR

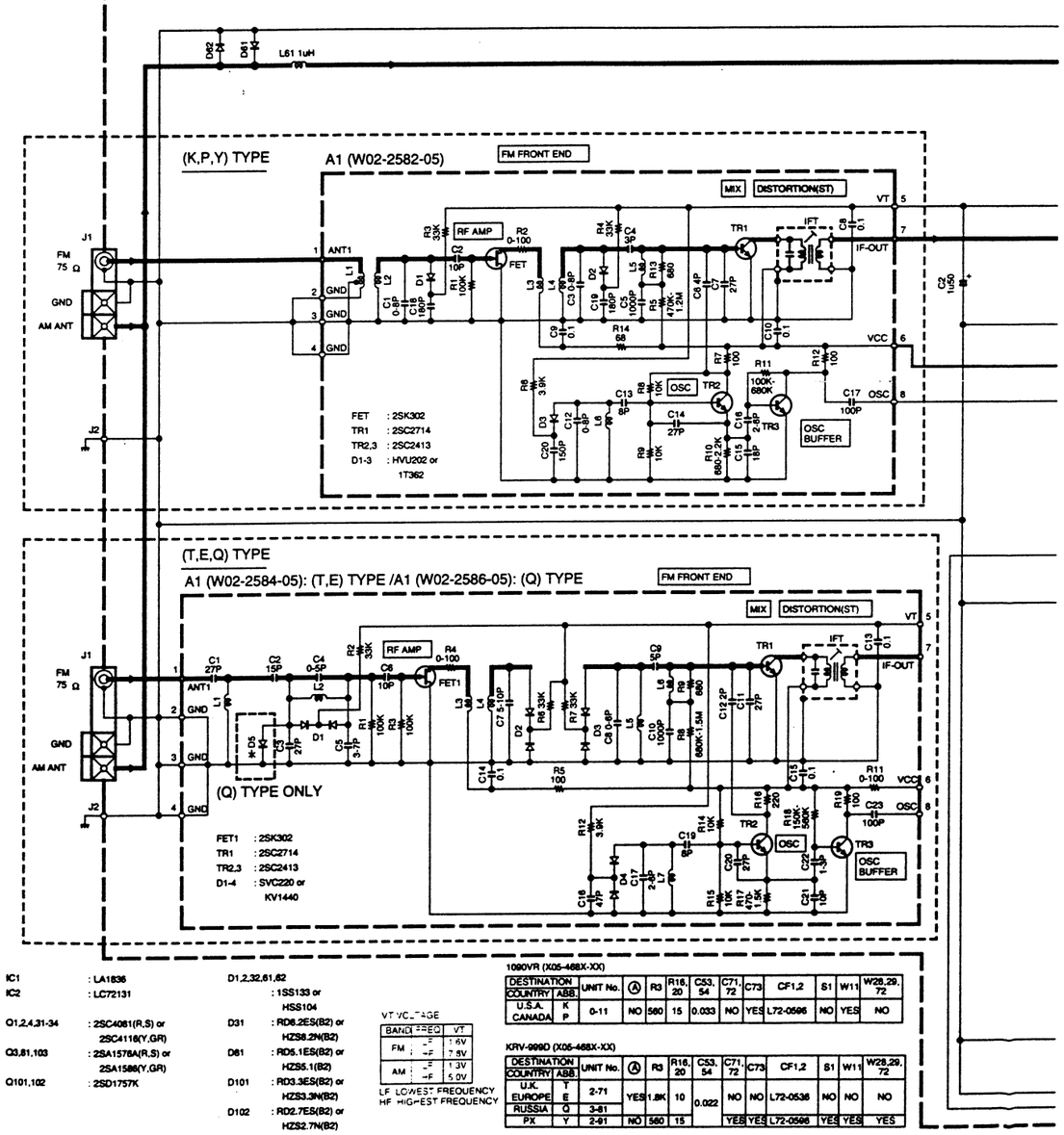
KENWOOD

Y05-3300-10

(X05-468X-XX) (K,P,T,E,Q,Y) TYPE

The DC voltage is an actual reading measured with a high impedance type voltmeter as the AM/FM signal generator is specified to the conditions as shown in the list below. The measurement value may vary depending on the measuring instruments used or on the product. The value shown in ( ) is actual reading measured in the AM mode.

MODE	CARRIER	MODULATION		ANT INPUT
		FREQUENCY	DEVIATION	
FM	98MHz	1kHz	STEREO 67.5kHz 7.5kHz(Pilot)	60dB
AM	1000(999)kHz	400Hz	MONO 30% MOD	60dB



VT VOLTAGE

BAND	FREQ	VT
FM	LF	1.6V
	HF	7.8V
AM	LF	1.3V
	HF	5.0V

LF LOWEST FREQUENCY
HF HIGHEST FREQUENCY

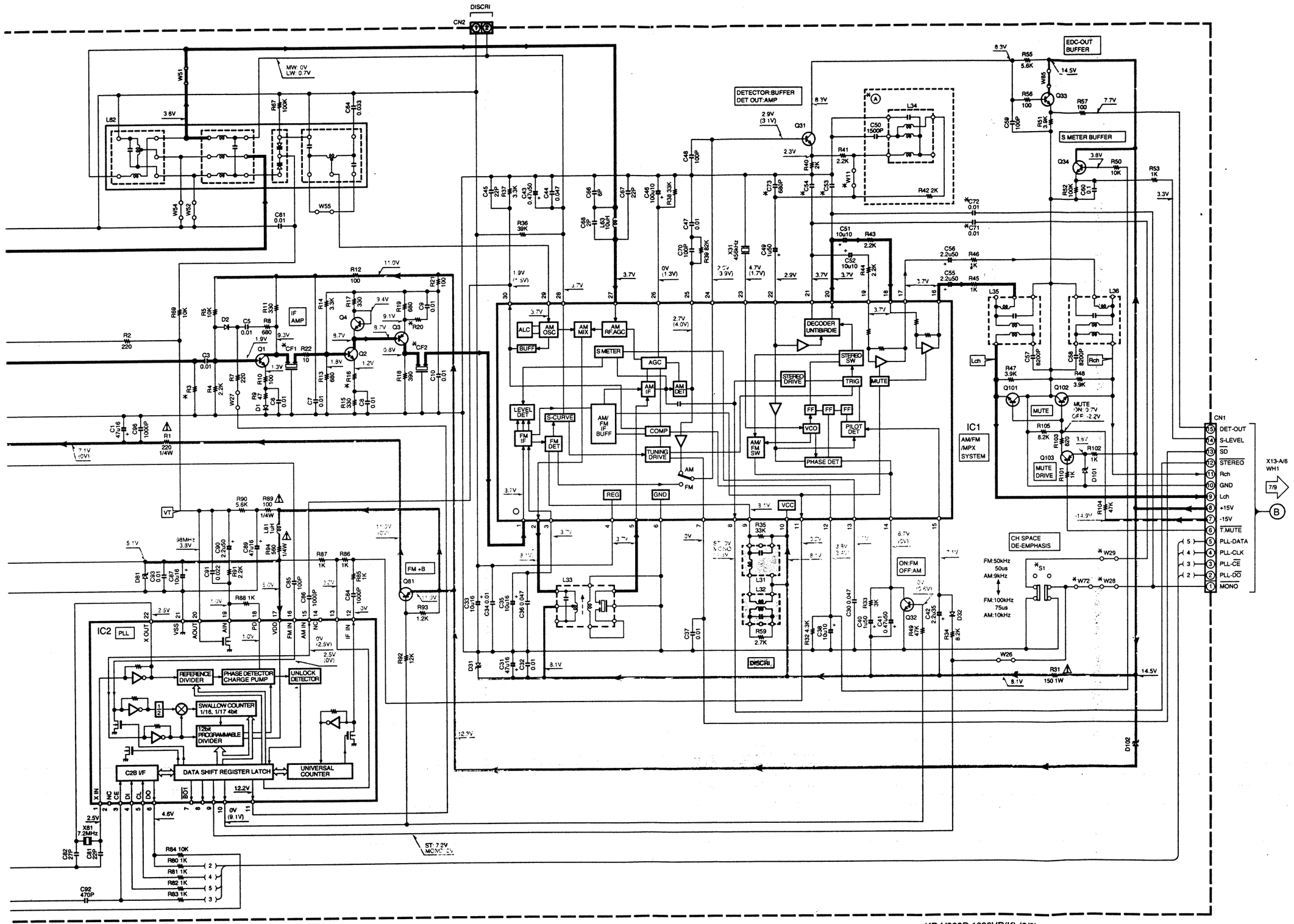
1090VR (X05-468X-XX)

DESTINATION		UNIT No.	Ⓐ	R3	R16, 20	C53, 54	C71, 72	C73	CF1,2	S1	W11	W28,29, 72
COUNTRY	ABB.											
U.S.A. CANADA	K P	0-11	NO	560	15	0.033	NO	YES	L72-0596	NO	YES	NO

KRV-999D (X05-468X-XX)

DESTINATION		UNIT No.	Ⓐ	R3	R16, 20	C53, 54	C71, 72	C73	CF1,2	S1	W11	W28,29, 72
COUNTRY	ABB.											
U.K.	T	2-71	YES	1.8K	10	0.022	NO	NO	L72-0536	NO	NO	NO
EUROPE	E											
RUSSIA	Q	3-81										
PX	Y	2-91	NO	560	15		YES	YES	L72-0596	YES	YES	YES

CAUTION: *For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).* ⚠ *indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.*



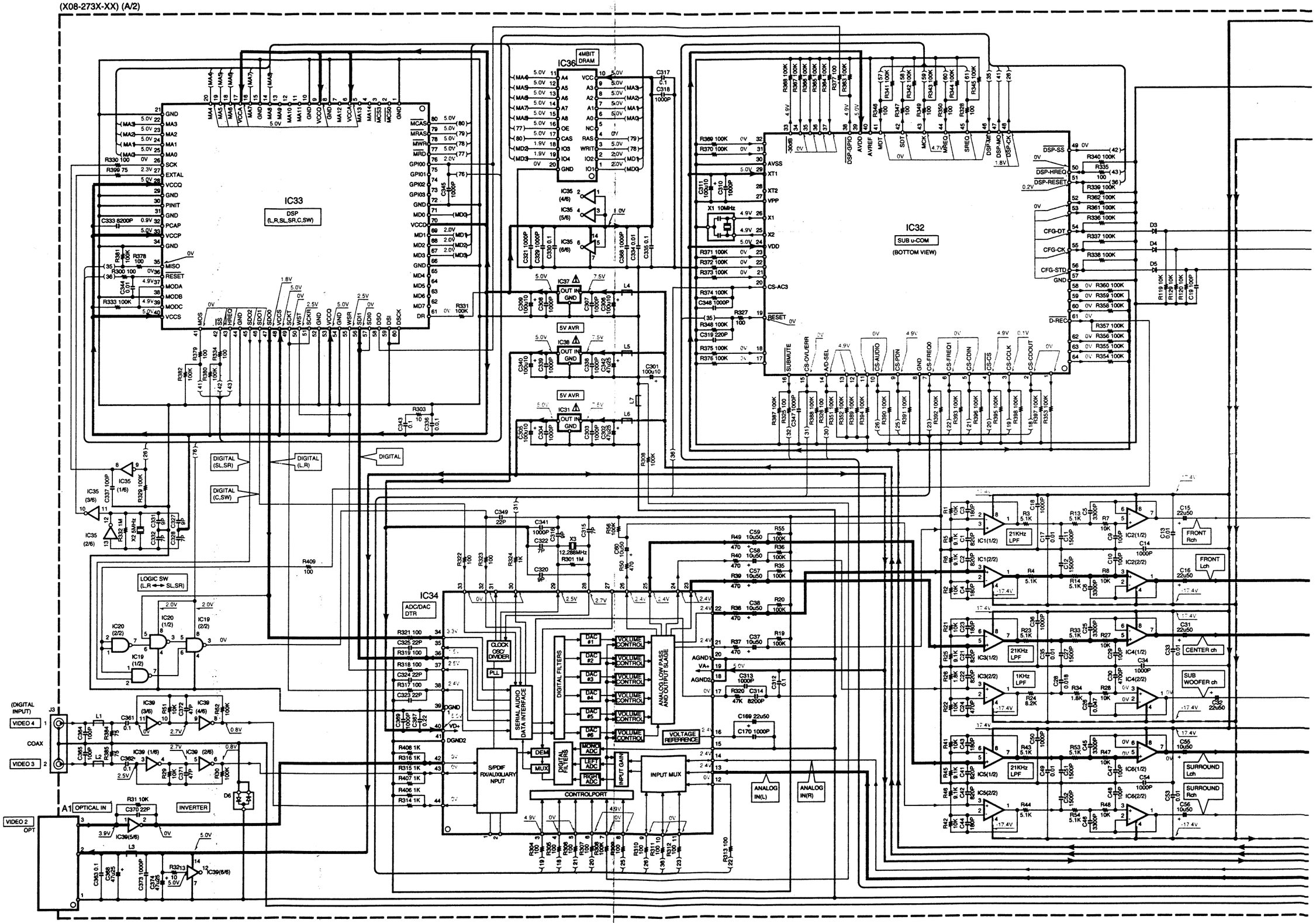
KR-V999D,1090VR(K) (2/9)

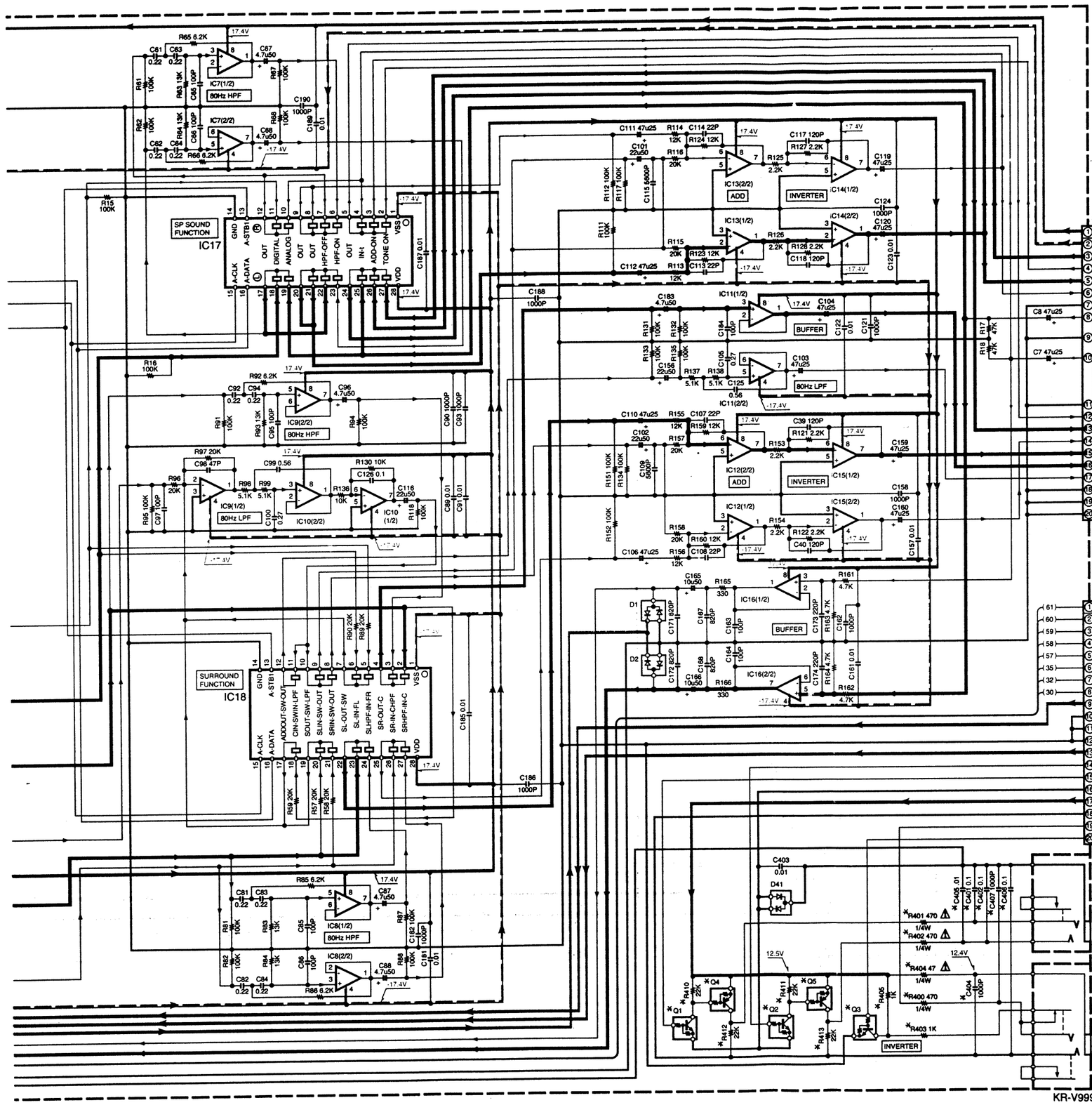
KR-V999D/1090VR

Y05-3300-10

KENWOOD

(X08-273X-XX) (A/2)





KR-V999D (X08-273X-XX)

DESTINATION	ABB	UNIT NO	J1,2	D1-5	C401,402 404-407	C401,402 404-407
U.K.	T	2-71	NO	NO	NO	NO
EUROPE	E					
RUSSIA	O					
GENERAL MARKET	M	2-91				
CHINA	C					
PX	Y					

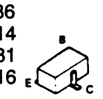
1090VR (X08-273X-XX)

DESTINATION / COUNTRY	ABB	UNIT NO	J1,2	D1-5	C401,402 404-407	C401,402 404-407
U.S.A.	K	0-10	YES	YES	YES	YES
CANADA	P					

(X08-) (A/2)

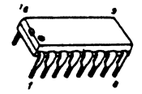
IC1-16	:	NJM4580ED or NJM4580E
IC17	:	TC9163AF
IC18	:	TC9162AF
IC19,20	:	TC7W00FU
IC31,37,38	:	TA7805S or uPC7805AHF
IC32	:	uPD78016FGC522
IC33	:	DSPF56009FJ81
IC34	:	CS4226-KQ
IC35,39	:	TC74HCU04AF
IC36	:	LH64256CK-70
Q1-3	:	UN5212 or DTC124EUA
Q4,5	:	UN5112 or DTA124EUA
D1,2,6,41	:	DA204K
D3-5	:	MA110

UN5219
2SA1586
2SC2714
2SC4081
2SC4116

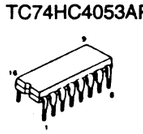


2SB1308

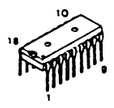
MM1067XD



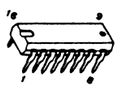
TC74HC4051AP
TC74HC4053AP



NJU3713D

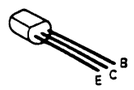


SAA6579SN
761200N



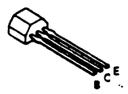
2SA1123
2SA1534A
2SA992
2SC1845
2SC2003
2SC2631

2SC28782S
C3940A2S
D863



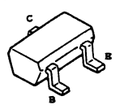
DTA113ZSA
DTA124ESA
DTC124ESA
DTC143TSA
UN4112

2SA1048
2SC2458



2SD2012

2SD1757K

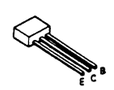


NJM4565D-
DNJM4580E

2SA1535
2SB1370
2SD2061

UN4212
UN4216
UN4219
2SA1309A

2SC3311A



CAUTION: *For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).* ⚠ *indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.*

The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.

KR-V999D,1090VR(K) (3/9)

Y05-3300-10

KR-V999D/1090VR

KENWOOD

(X08-273X-XX) (B/2)

IC71,72
VIDEO SEL. (AUDIO)

(AUDIO)

J71

VIDEO1
REC OUT
PLAY IN
VIDEO2
VIDEO3 PLAY IN
VIDEO4 PLAY IN
Lch
Rch

J72

IC71
IC72

IC51,54,57,60
ELECTRIC VOL.

IC51 IC54 IC57 IC60

ROOM B (L)
ROOM B (R)
FLch
FRch
SLch
SRch
Cch
SWch

IC52(1/2) IC52(2/2) IC55(1/2) IC55(2/2) IC58(1/2) IC58(2/2) IC61(1/2) IC61(2/2)

BUFFER
MUTE
MUTE B

MUTE DRIVE
MUTE B DRIVE
ATT. DRIVE

INVERTER

REPEATER OUT 1
REPEATER OUT 2
REPEATER OUT 3

CN52

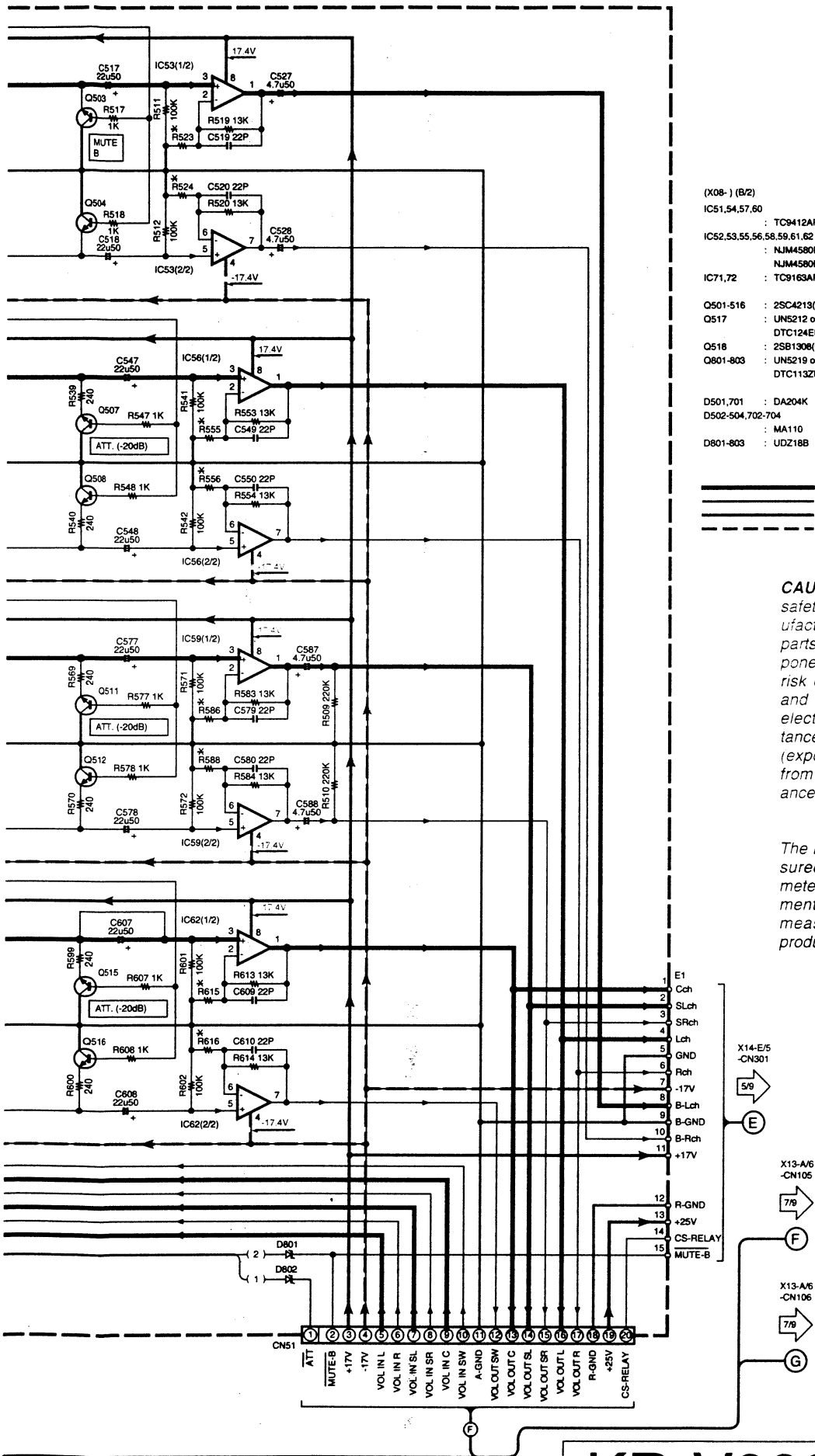
GND F.AUX Lch F.AUX Rch ROOM B Rch ROOM B Lch SEL OUT Lch SEL OUT Rch SEL IN Lch SEL IN Rch D-GND +12V LOUD REP OUT SW ST 1 SW ST 2 MUTE CLK DAT VOL STB D-GND

KR-V999D (X08-273X-XX)

DESTINATION		UNIT No.	J73-75	Q517,518	D704	C901-904	R414,902,903	R523,524,555,556,585,586,615,616
COUNTRY	ABB							
U.K. RUSSIA EUROPE	TOE	2-71	NO	NO	NO	NO	NO	3.6K
GENERAL MARKET CHINA PX	MCY	2-91						2.7K

1090VR (X08-273X-XX)

DESTINATION		UNIT No.	J73-75	Q517,518	D704	C901-904	R414,902,903	R523,524,555,556,585,586,615,616
COUNTRY	ABB							
U.S.A.	K	0-10	YES	YES	YES	YES	YES	2.7K
CANADA	P							



(X08-) (B/2)

IC51,54,57,60 : TC9412AP

IC52,53,55,56,58,59,61,62 : NJM4580ED or NJM4580E

IC71,72 : TC9163AF

Q501-516 : 2SC4213(B)

Q517 : UN5212 or DTC124EUA

Q518 : 2SB1308(Q,R)

Q801-803 : UN5219 or DTC113ZUA

D501,701 : DA204K

D502-504,702-704 : MA110

D801-803 : UDZ18B

SIGNAL LINE
GND LINE
+B LINE
-B LINE

CAUTION: *For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.*

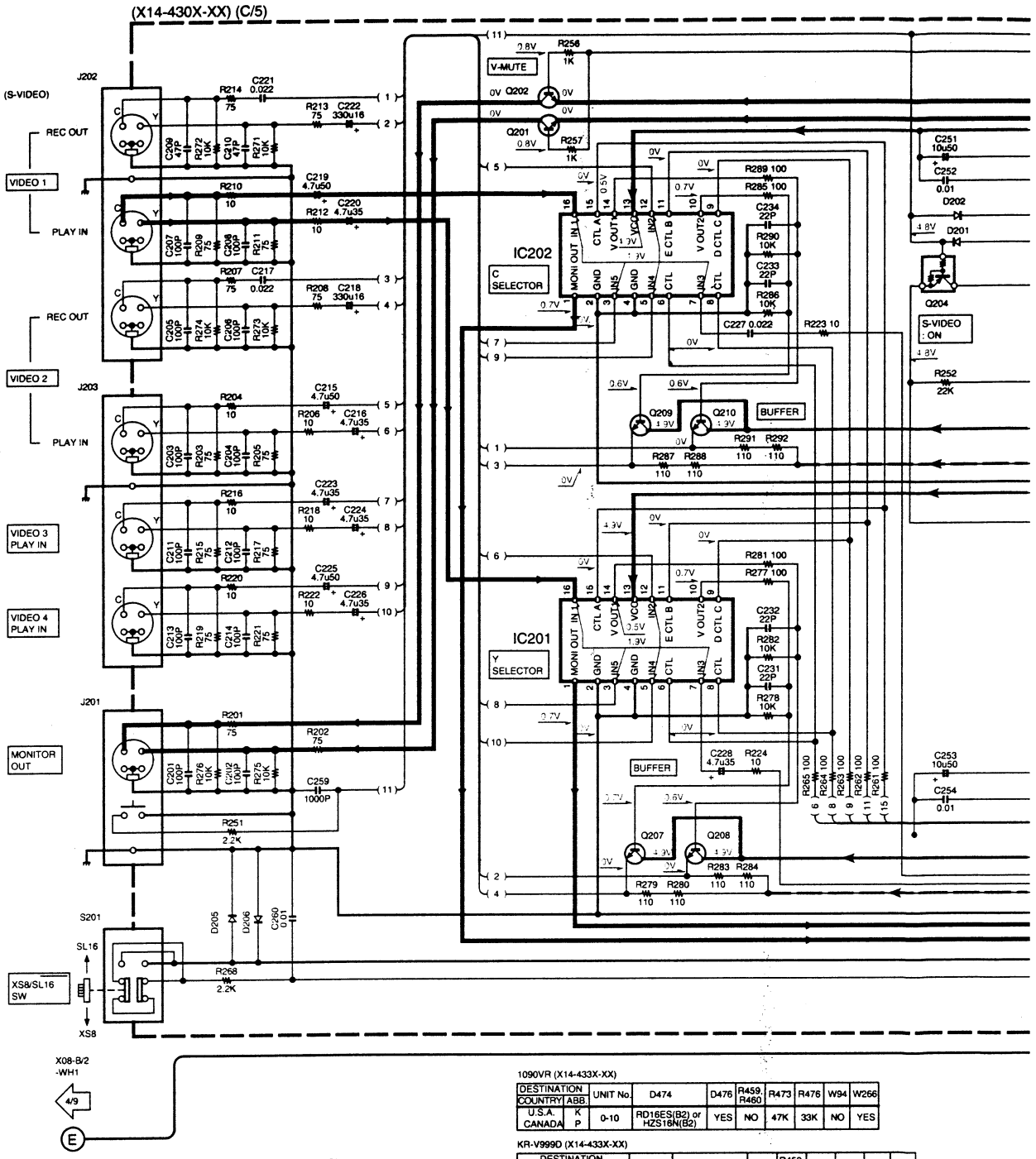
The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.

KR-V999D,1090VR(K) (4/9)

Y05-3300-10

KR-V999D/1090VR

KENWOOD



IC201,202	: SN76120ON
IC203,204	: TC74HC4053AP
IC205,206	: MC14577CP
IC301	: NJM4565D-D
Q201,202	: 2SC2878(B)
Q204,206	: UN4119 or DTA113ZSA
Q205,451,452	: UN4219 or DTC113ZSA
Q207-210	: 2SC2003(L,K)
Q301-304,351-354,401,402	: 2SA992(F,E)
Q305-308,355-358,403,404	: 2SC2631(R,S)
Q309,310,359,360,405	: 2SA1123(R,S)
Q311,312,361,362,406,471	: 2SA1048(Y,GR) or 2SA1309A(Q,R)
Q472	: UN4212 or DTC124ESA
Q475	: 2SC1845(F,E)
Q476	: 2SA1535(R,S)

1090VR (X14-433X-XX)

DESTINATION		UNIT No.	D474	D476	R459, R460	R473	R476	W94	W266
COUNTRY	ABB.								
U.S.A. CANADA	K P	0-10	RD16ES(B2) or HZS16N(B2)	YES	NO	47K	33K	NO	YES

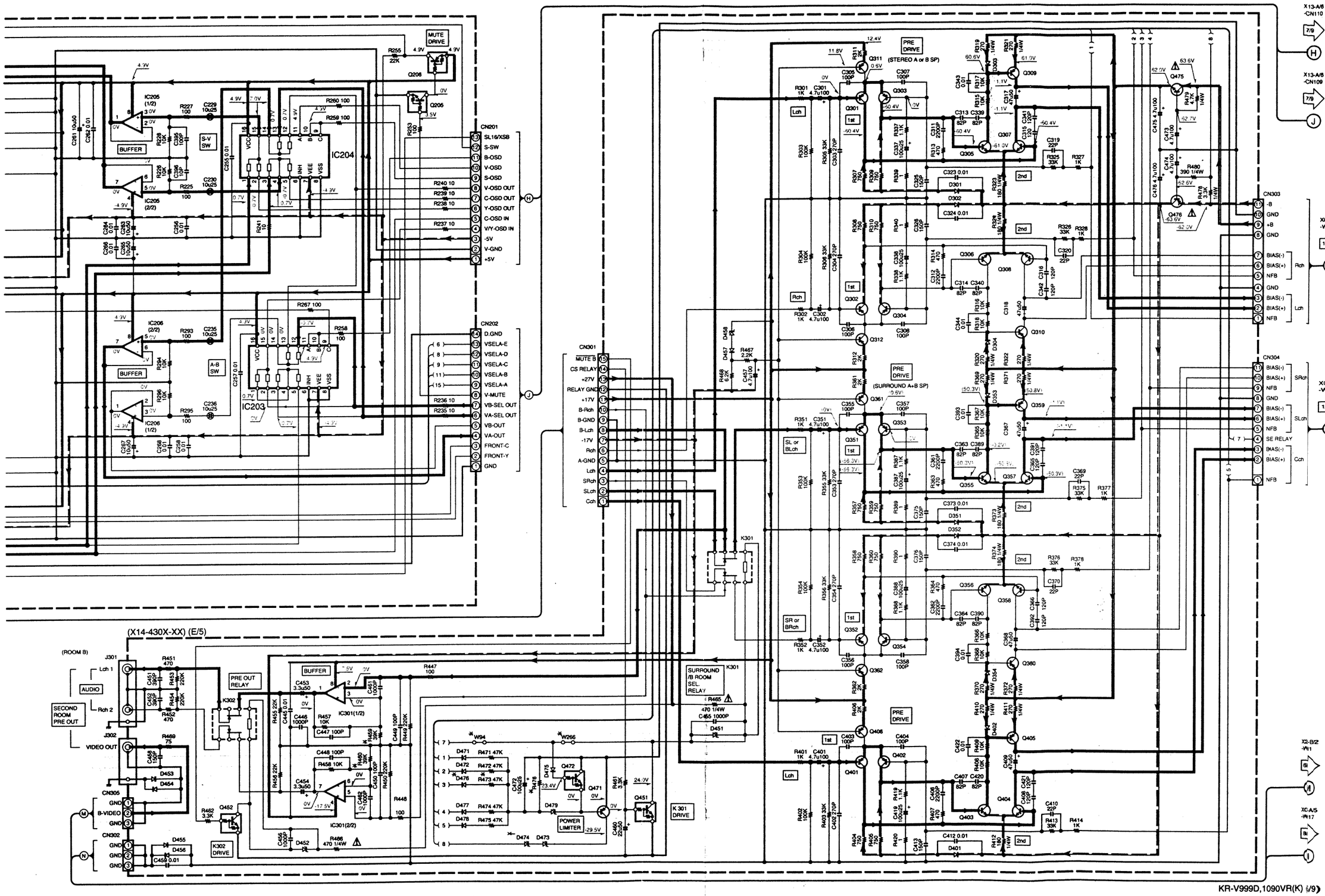
KR-V999D (X14-433X-XX)

DESTINATION		UNIT No.	D474	D476	R459, R460	R473	R476	W94	W266
COUNTRY	ABB.								
GENERAL MARKET CHINA PX	M C Y	0-21	RD16ES(B2) or HZS16N(B2)	YES	NO	YES	33K	NO	YES
U.K. EUROPE RUSSIA	T E Q	2-71	RD8.2ES(B2) or HZS8.2(B2)	NO	YES	NO	62K	YES	NO

D201,202,205,206, 301-304,351-354,401,402,453-457,475	: 1SS133 or HSS104
D471,472,476-478	: HSS104A or 1SS131
D479	: RD11ES(B2) or HZS11N(B2)
D451,452	: RD24ES(B) or HZS24N(B)
D458	: RD5.1JS(B2) or HZS5.1S(B2)
D473	: RD18ES(B2) or HZS18N(B2)
D474	: *

SIGNAL LINE
GND LINE
+B LINE
-B LINE

The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.



CAUTION: *For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.*

Y05-3300-10

KR-V999D/1090VR

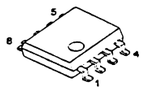
KENWOOD

CAUTION: *For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.*

The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.

MC14577CP
NJM4580DNJ
M4580D-D

NJM4565M
NJM4580ED
TC7W00FU

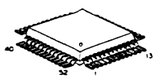


UPC7805AHF

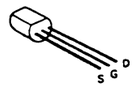
DA204K

UN5212

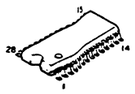
UPD16311



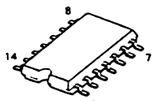
2SK246



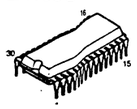
TC9162AF
TC9163AF



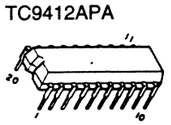
TC74HCU04AF



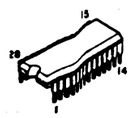
LA1836



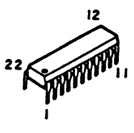
TC9412APA

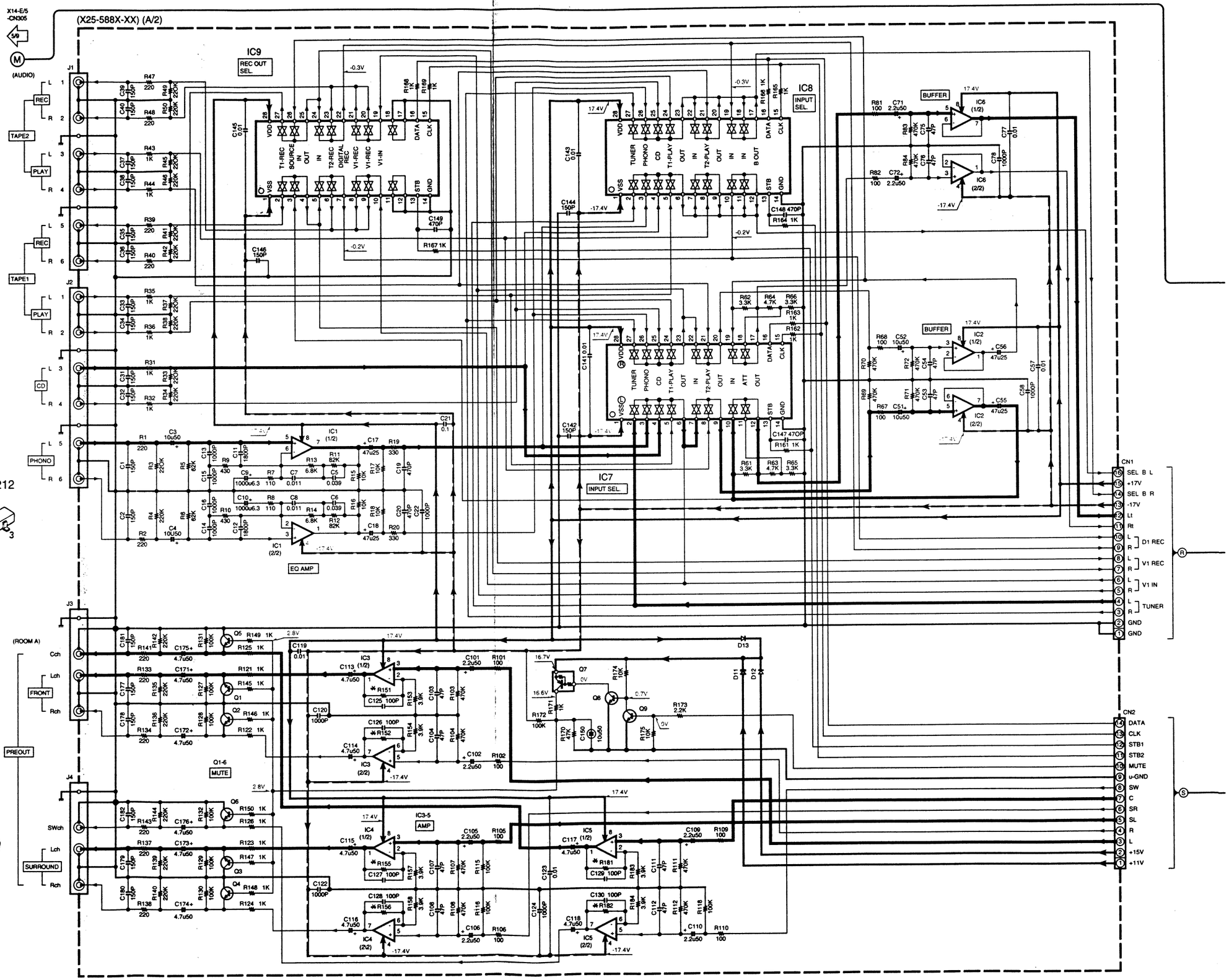


TC9162N
TC9164N



LC72131





(X25-588X-XX) (B/2)

IC1-6 : NJM4580D-D or NJM4580D
IC7,8 : TC9164AN
IC9 : TC9162AN
IC201 : SN76120ON
IC202 : TC74HC4051AP
IC203 : MC14577CP
IC204,206 : MB90089PF-188
IC205,207 : MM1067XD
IC208 : TC74HC4053AP
IC209 : LA7950

Q1-6,206,207 : 2SC2878(B)
Q7 : UN4112 or DTA124ESA
Q8,9,201,203-205,212 : 2SC2458(Y,GR) or 2SC3311A(Q,R)
Q202 : 2SA1048(Y,GR) or 2SA1309A(Q,R)
Q208,211 : UN4119 or DTA113ZSA
Q209,210 : UN4219 or DTC113ZSA
Q213,214 : 2SC2003(L,K)

D11-13,201,202 : 1SS133 or HSS104

SIGNAL LINE
GND LINE
+B LINE
-B LINE

1090VR (X25-588X-XX)

DESTINATION / COUNTRY	UNIT ABB	No.	Ⓐ Ⓑ Ⓒ	R151,152,155, 156,181,182	R228	W11,12, 27,70
U.S.A.	K	0-10	NO	470	750	YES
CANADA	P					

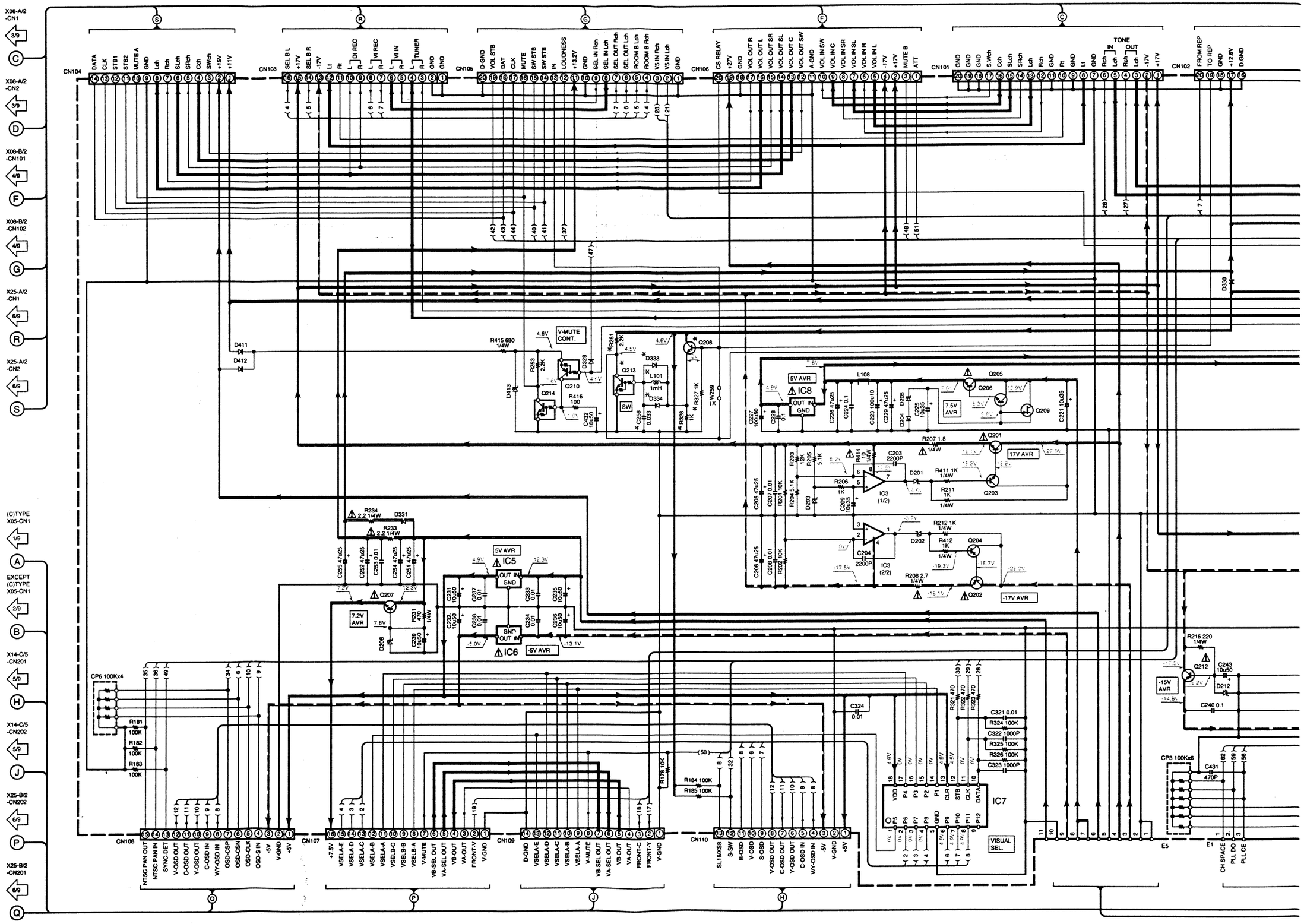
KR-V999D (X25-588X-XX)

DESTINATION / COUNTRY	ABB	UNIT No.	Ⓐ Ⓑ Ⓒ	R151,152,155, 156,181,182	R228	W11,12, 27,70
GENERAL MARKET	M					
CHINA	C	0-21		470		
PX	Y		YES		390	NO
U.K.	T			1.6K		
EUROPE	E	2-71				
RUSSIA	Q					

KR-V999D,1090VR(K) (6/9)

KR-V999D/1090VR

KENWOOD



The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.

KR-V999D (X13-747X-XX)

DESTINATION		UNIT NO	C256	R176	R191	R192, 194	R193	R195	R196	R197	R251, 327,328	L101	Q208, 213	D333, 334	W258
COUNTRY	ABB														
U.K.	T	2-71	NO	YES	YES	NO	NO	YES	YES	NO	NO	NO	NO	NO	YES
EUROPE	E				NO	YES									
RUSSIA	O	3-81		NO	YES	NO	YES			YES					
GENERAL MARKET	M	0-21													
CHINA	C														
PX	Y	2-91													

1090VR (X13-747X-XX)

DESTINATION		UNIT NO	C256	R176,191,192, 196,251,327,328	R193-195, 197	L101	Q208, 213	D333, 334	W259
COUNTRY	ABB								
U.S.A.	K	0-10	YES	YES	NO	YES	YES	YES	NO
CANADA	P								

IC1 : uPC78058GC-902
IC2 : S-806D-Z
IC3 : NJM4580D-D
IC5,8 : TA7805S
IC6 : TA79005S or uPC7905HF
IC7 : NJU3713D
Q201,205,211 : 2SD2061
Q202,212 : 2SB1370
Q203,206-208,301 : 2SC2458(Y,GR) or 2SC3311A(Q,R)
Q204 : 2SA1048(Y,GR) or 2SA1309A(Q,R)
Q209 : 2SK246(Y,GR)
Q210 : UN4119 or DTA113ZSA
Q213,214 : UN4219 or DTC113ZSA
D201,202,211,212 : RD15JS(B2) or HZS15S(B2)
D203 : RD5.1JS(B2) or HZS5.1S(B2)
D204,317,327-330,333,334, 351-354,411,412 : 1SS133 or HSS104
D205 : RD7.5JS(B2) or HZS7.5S(B2)
D206 : RD8.2JS(B2) or HZS8.2S(B2)
D207 : RD11ES(B) or HZS11N(B)
D302-306,313-316 : 1SS131 or HSS104A
D413 : RD4.7ES(B) or HZS4.7N(B)

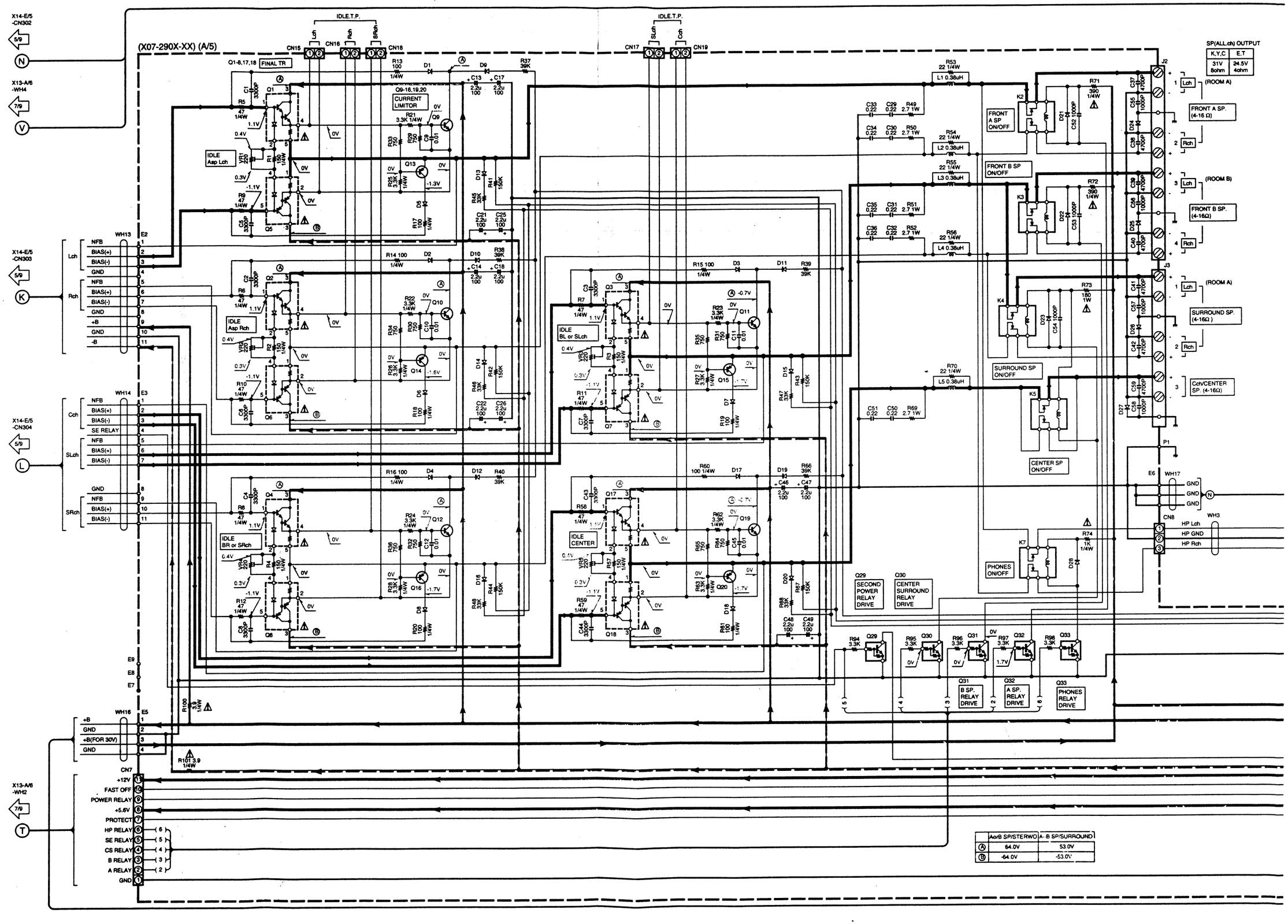
SIGNAL LINE
GND LINE
+B LINE
-B LINE

X07-A/5 -CN7 8/9 (T)
X14-A/5 -CN101 9/9 (U)
X13-B/6 -CN401 8/9 (V)
(X13-747X-XX) (A/6)
(X13-) (C/6)

CAUTION: *For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.*

KR-V999D/1090VR

KENWOOD


(X07-290X-XX) (A/5)
IDLE.T.P.
CN15 CN16 CN18 CN17 CN19
Lch Rch SRch SLch Cch
Q1-8,17,18 FINAL TR
Q9-16,19,20 CURRENT LIMITER
IDLE Asp Lch
IDLE Asp Rch
IDLE BL or SLch
IDLE BR or SRch
IDLE CENTER
X14-E/5 -CN302
X13-A/6 -WH4
X14-E/5 -CN303
X14-E/5 -CN304
X13-A/6 -WH2
WH13 WH14 WH16
NFB BIAS(+) BIAS(-) GND +B -B SE RELAY
CN7
+12V FAST OFF POWER RELAY +5.6V PROTECT HP RELAY SE RELAY CS RELAY B RELAY A RELAY GND
L1 0.38uH L2 0.38uH L3 0.38uH L4 0.38uH L5 0.38uH
FRONT A SP ON/OFF
FRONT B SP ON/OFF
SURROUND SP ON/OFF
CENTER SP ON/OFF
PHONES ON/OFF
SP(ALL ch) OUTPUT
K,Y,C E,T
31V 8ohm 24.5V 4ohm
FRONT A SP. (4-16 Ω)
FRONT B SP. (4-16Ω)
SURROUND SP. (4-16Ω)
Cch/CENTER SP. (4-16Ω)
(ROOM A) (ROOM B)
WH17 GND GND GND
CN8 HP Lch HP GND HP Rch
Q29 SECOND POWER RELAY DRIVE
Q30 CENTER SURROUND RELAY DRIVE
Q31 B SP. RELAY DRIVE
Q32 A SP. RELAY DRIVE
Q33 PHONES RELAY DRIVE
A or B SP/STEREO
A, B SP/SURROUND
Ⓐ 64.0V 53.0V
Ⓑ -64.0V -53.0V

KR-V999D (X07-290X-XX)

DESTINATION COUNTRY	ABB	UNIT No.	F1	F2	F3	T1	J1	R93	WH1	WH2	W181	W182	W183	CN5	CN14	P3,4	CN3,4	K1
GENERAL MARKET	M	0-21	T3.15AL 250V	T3.15AL 250V	NO	L07-0865-05	E03-0149-05	NO	E35-1325-05	E35-1326-05	NO	NO	YES	NO	YES	YES	YES	S76-0070-05 TV-5
CHINA	C	3-01		NO		L07-2114-05	E03-0330-05					YES		YES		NO	NO	
PX	Y	2-91		T3.15AL 250V		L07-0865-05	E03-0148-05				YES	NO			NO		YES	
U.K.	T	0-51				L07-0867-05	E03-0310-05		E35-1426-05	E35-1828-05						NO	NO	
EUROPE	E	2-71		NO	T2.5AL 250V	L07-0867-05	E03-0149-05		E35-1426-05	E35-1828-05	NO	YES	NO	NO	YES	YES	YES	
RUSSIA	Q	3-81			NO	L07-2114-05			NO				YES					

KR-V999D (X13-747X-XX)

DESTINATION COUNTRY	ABB	UNIT NO	C421	R401	W301	WH404 405	F11-13, 17	F14	F15, 16	S1
U.K. EUROPE	T E	2-71	YES	NO	YES	YES	T1.25A L 250V	T500mA L 250V	T1.6A L 250V	YES
GENERAL MARKET CHINA	M C	0-21								
RUSSIA	Q	3-81								NO
PX	Y	2-91	NO			NO				

1090VR (X07-290X-XX)

DESTINATION COUNTRY	ABB	UNIT No.	F1	F2	F3	T1	J1	R93	WH1	WH2	W181	W182	W183	CN5	CN14	P3,4	CN3,4	K1
U.S.A. CANADA	K P	0-10	10A 125V	NO	NO	L07-0864-05	E03-0148-05	YES	E35-1426-05	E35-1828-05	YES	YES	YES	YES	NO	NO	NO	S76-0065-05 TV-8

1090VR (X13-747X-XX)

DESTINATION COUNTRY	ABB	UNIT NO	C421	R401	W301	WH404 405	F11-13, 17	F14	F15, 16	S1
U.S.A. CANADA	K P	0-10	NO	YES	NO	NO	1.25A 125V	1A 125V	1.6A 125V	NO

(X07-)

Q1-4,17	: TRAITR4N 5✻	D1-28,31,35-37, 43,45-47	: 1SS131 or HSS104A
Q5-8,18	: TRAITR4P 5✻	D29	: RD11ES(B2) or HZS11N(B2)
Q9-12,19	: 2SC2631(R,S)	D30	: RD15ES(B2) or HZS15N(B2)
Q13-16,20,21	: 2SA992(F,E)	D32,33	: D5FB20-4002-L2
Q22,23	: 2SC1845(F,E)	D34	: RD6.2ES(B2) or HZS6.2N(B2)
Q24	: 2SD2061(E,F) or 2SD2012	D38-41,405	: RD2.7ES(B2) or HZS2.7N(B2)
Q25,37	: UN4216 or DTC143TSA	D42	: RD5.1JS(B2) or HZS5.1S(B2)
Q26,27,29-33	: UN4219 or DTC113ZSA	D44	: 1B4B41
Q28,36,38	: UN4212 or DTC124ESA	D401-404	: RD7.5JS(B) or HZS7.5S(B)
Q34	: 2SC2003(L,K)	D406,407	
Q35	: 2SC3940A(R,S) or 2SD863(E,F)		

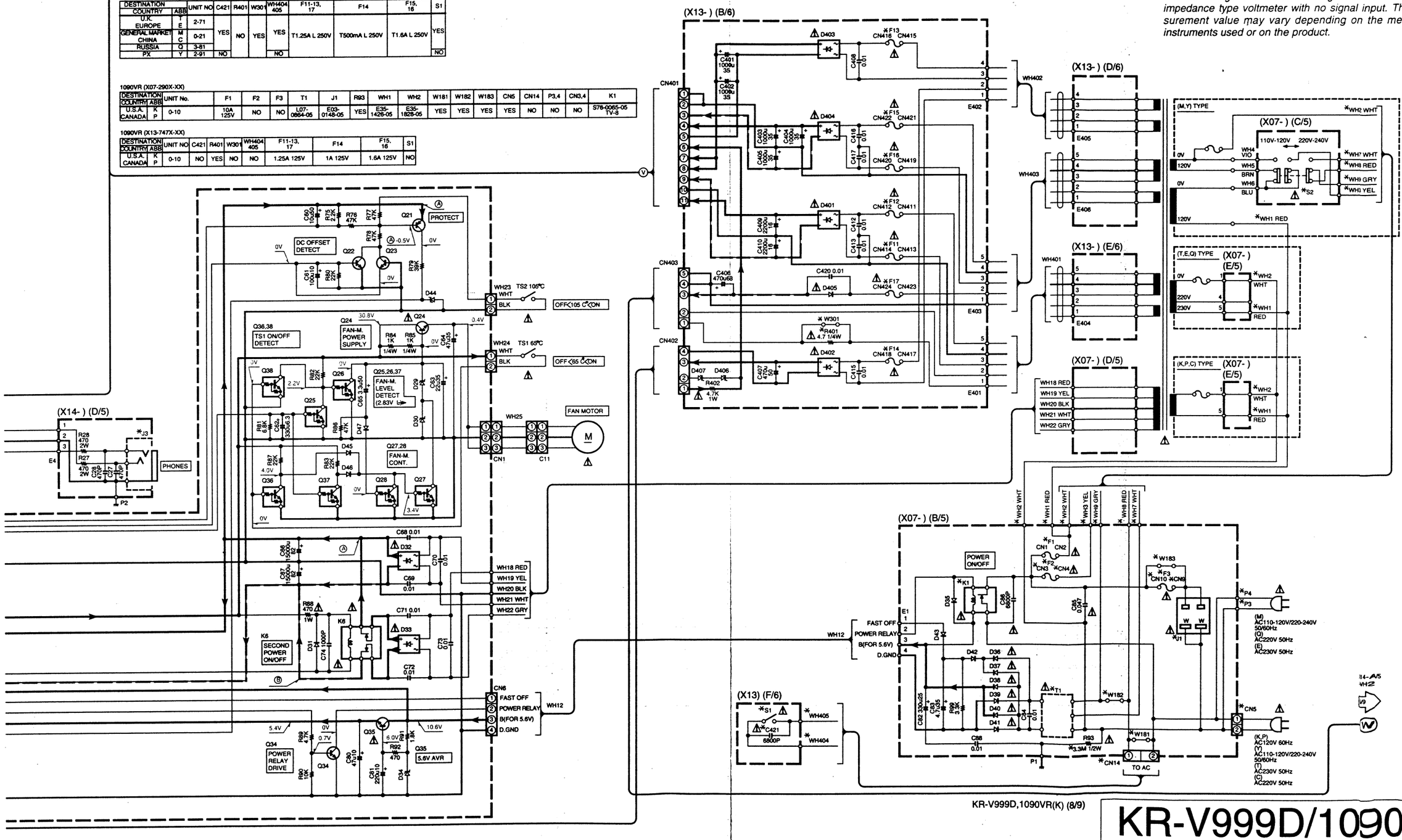
(X13-)

D401-404	: 1B4B41
D405	: S6688 or 1SR139-400
D406,407	: RD7.1JS(B) or HZS7.5S(B)

SIGNAL LINE
GND LINE
+B LINE
-B LINE

CAUTION: *For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.*

The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.



KR-V999D,1090VR(K) (8/9)

Y05-3300-10

KR-V999D/1090VR

KENWOOD

X13-B/6 -CN403 7/9 W

X13-A/6 -CN111 7/9 U

ANODE CONNECTION

	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	TA	a	a	a	a	a	a	a	a	a	FM
P2	NEWS	j	j	j	j	j	j	j	j	j	AM
P3	INFO.	h	h	h	h	h	h	h	h	h	kHz
P4	RDS	k	k	k	k	k	k	k	k	k	MHz
P5	EON	b	b	b	b	b	b	b	b	b	AC-3
P6	PTY	f	f	f	f	f	f	f	f	f	SURROUND
P7	TP	g	g	g	g	g	g	g	g	g	3 STEREO
P8	SP.	m	m	m	m	m	m	m	m	m	S.DIRECT
P9	A (UPPER)	c	c	c	c	c	c	c	c	c	M.INPUT
P10	B (UPPER)	e	e	e	e	e	e	e	e	e	DSP
P11	ROOM	r	r	r	r	r	r	r	r	r	LOUDNESS
P12	A (LOWER)	n	n	n	n	n	n	n	n	n	TAPE 2
P13	B (LOWER)	p	p	p	p	p	p	p	p	p	MEMORY
P14	-	d	d	d	d	d	d	d	d	d	AUTO
P15	-	-	-	-	-	-	-	col	-	-	STEREO
P16	-	-	-	-	-	-	-	Dp	-	-	TUNED

IC1 : NJM4565L-D
IC2 : NJM4565D-D
IC101 : UPD16311
IC102 : SAA6579

Q1,2,101,102 : 2SC2458(Y,GR) or 2SC3311A(Q,R)
Q151 : 2SC1534A(R,S)
Q152 : 2SA1048(Y,GR) or 2SA1309A(Q,R)

D1-4,102.107-115 : 1SS133 or HSS104
D101,103 : 1SS131 or HSS104A
D104-106 : B30-2509-05
D151,152 : RD3.3ES(B2) or HZS3.3N(B2)
D153 : RD11ES(B2) or HZS11N(B2)

A1 : W02-2561-05
ED : 11-MT-110GK

(X14-430X-XX) (A/5)

ED1

11G P1 TA NEWS INFO. P2 P3 P4 P5 P6 RDS EON PTY P7 P8 TP SP. P9 A (UPPER) P10 B (UPPER) P11 ROOM P12 A (LOWER) P13 B (LOWER)

10G 9G 8G 7G 6G 5G 4G 3G 2G

1G P1 FM P5 AC-3 P9 M.INPUT P2 AM P6 SURROUND P10 DSP P3 kHz P7 3 STEREO P11 LOUDNESS P4 MHz P8 S.DIRECT P12 TAPE2

CN101
TONE L IN (30)
TONE L OUT (29)
GND (28)
TONE R OUT (27)
TONE R IN (26)
-17V (25)
+17V (24)
FRONT R OUT (23)
FRONT GND (22)
FRONT L OUT (21)
V GND (20)
FRONT V (19)
FRONT C (18)
FRONT Y (17)
NC (16)
VOL ENC1 (15)
VOL ENC2 (14)
SEL ENC1 (13)
SEL ENC2 (12)
FL-STB (11)
FL-CLK (10)
FL-DIN (9)
FL-DOUT (8)
REMOTE (7)
D.GND (6)
D.GND (5)
+5.6V (4)
RDS-CLK (3)
RDS-DATA (2)
RDS-DETOUT (1)

IC2(1/2) IC2(2/2) TONE CONTROL TREBLE BASS VR1 (VOL) 100K VR2 (BAL) 100K VR3 (TRE) 100K VR4 (BAS) 100K Q1 Q2

Q102 Q101 GRID DRIVE

IC101 FL DRIVER
GRID1 GRID2 GRID3 GRID4 GRID5 GRID6 GRID7 GRID8 GRID9 GRID10 GRID11 VDD LED5 LED4 LED3 LED2(2ch DOWNMIX) LED1(STANDBY) VEE(GND) OSC SW1 SW2 SW3 SW4 DOUT DIN CLK STB XR3 XR2 XR1 XR0 NC SEG1 SEG2 SEG3 SEG4 SEG5 SEG6 SEG7 SEG8/KS9 SEG9/KS8 SEG10/KS7 SEG11/KS6 SEG12/KS5 SEG13/KS4 SEG14/KS3 SEG15/KS2 SEG16/KS1 VDD

LEVEL INDICATOR
2ch DOWN MIX
STAND-BY

PRO-LOGIC S17
3-STEREO S26
AC-3 S15

RDS DEMODULATOR IC102 QUAL RDDATA VREF MUX VDDA VSSA CIN SCOUT RDCLK T57 OSCO OSC1 VDDD VSSD TEST TETLD

REMOTE SENSOR A1 VCC GND VOUT GND GND

INPUT SEL S35 MASTER VOL S34

(X14-) (B/5)

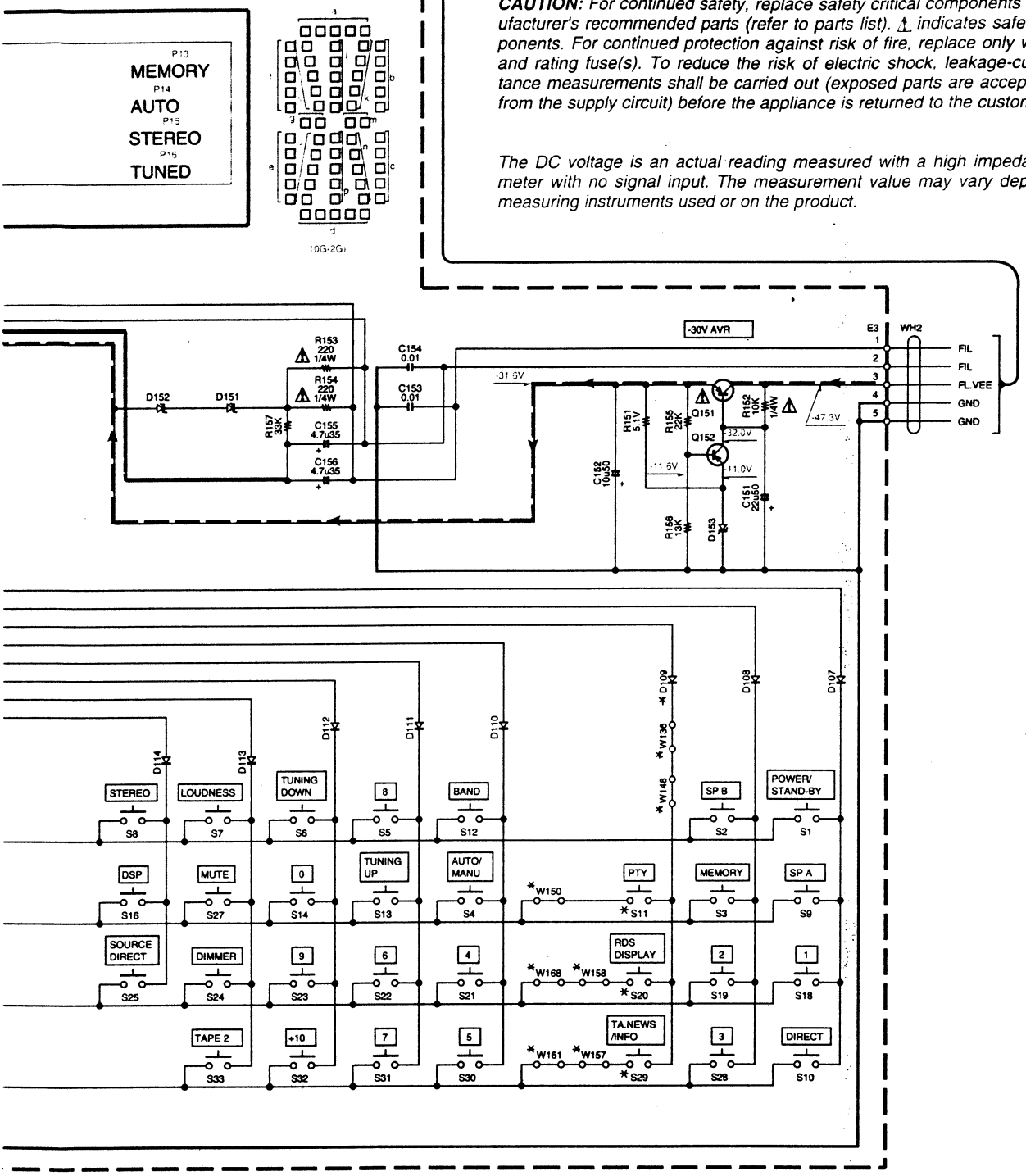
J1 1-Lch 2-Rch
AV AUX (FRONT) 3-VIDEO
S-VIDEO J2 Y C P1

BUFFER IC1 (1/2) IC1 (2/2)

E1 FRONT Rch (1) FRONT GND (2) FRONT Lch (3) -17V (4) +17V (5) V GND (6) FRONT V (7) FRONT C (8) FRONT Y (9) CHASSISGND (10) WH1 E1
L1 (23) L2 (22) L3 (21) L4 L5 (20) L6 (19) L7 (18) L8 (17)

CAUTION: *For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.*

The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.



1090VR (X14-433X-XX)

DESTINATION		UNIT No.	Ⓐ	D109	S11,20, 29	W136,148,150,157, 158,161,168
COUNTRY	ABB.					
U.S.A. CANADA	K P	0-10	YES	YES	YES	YES

KR-V999D (X14-433X-XX)

DESTINATION		UNIT No.	Ⓐ	D109	S11,20, 29	W136,148,150,157, 158,161,168
COUNTRY	ABB.					
GENERAL MARKET CHINA PX	M C Y	0-21	NO	NO	NO	NO
U.K. EUROPE RUSSIA	T E Q	2-71	YES	YES	YES	YES

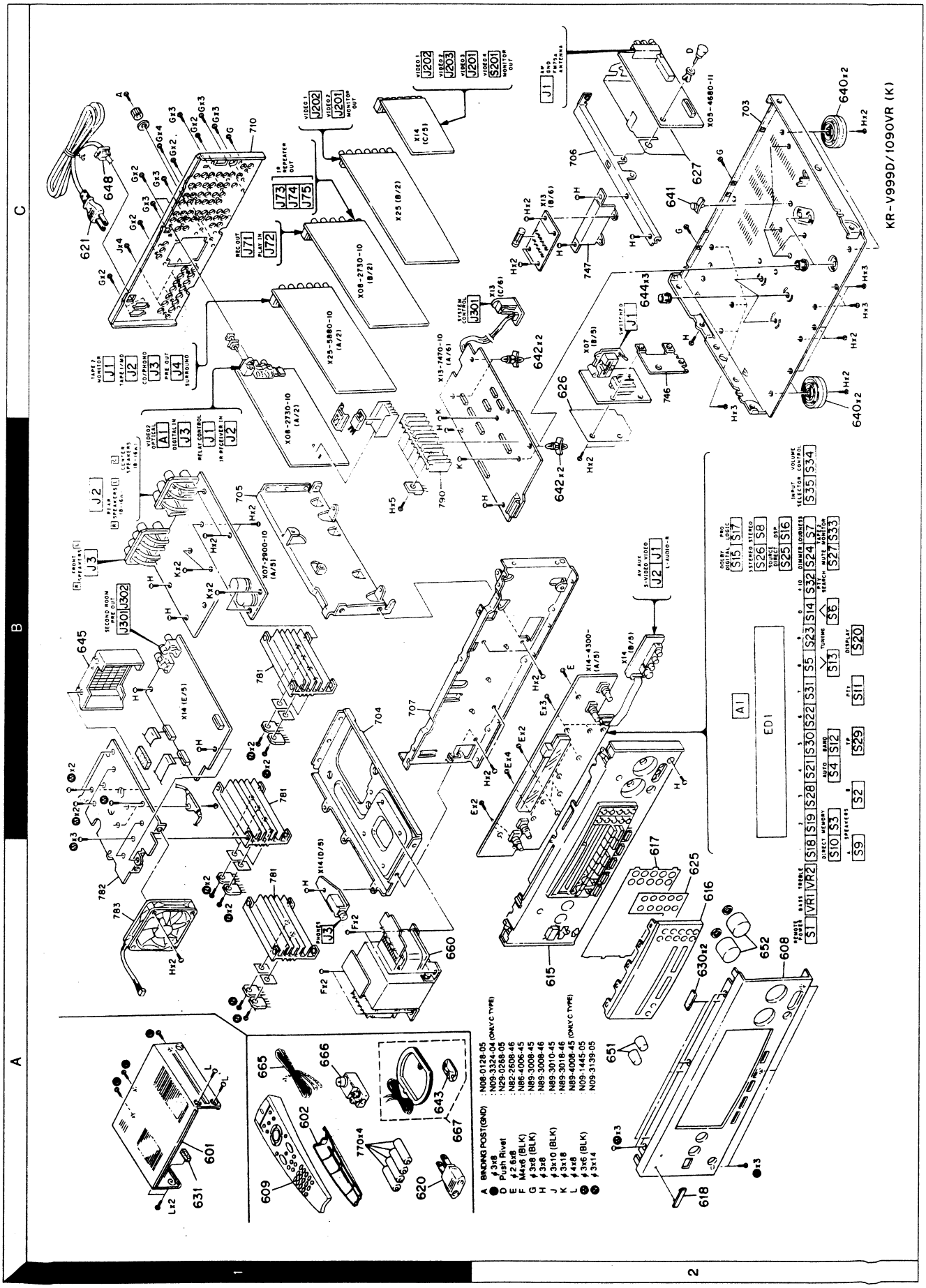
SIGNAL LINE
GND LINE
+B LINE
-B LINE

KR-V999D,1090VR(K) (9/9)

KR-V999D/1090VR
KENWOOD

KR-V999D/1090VR

EXPLODED VIEW (UNIT)



Parts with the exploded numbers larger than 700 are not supplied.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❶

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
			KR-V999D/1090VR			
601	1A	*	A01-3394-11	METALLIC CABINET(GOLD)	C	
601	1A	*	A01-3396-01	METALLIC CABINET(BLACK)	KPYMTE	
601	1A	*	A01-3396-01	METALLIC CABINET(BLACK)	Q	
602	1A	*	A09-0366-08	BATTERY COVER (FOR RC-R0905)		
608	2A	*	A60-1046-12	PANEL (TITAN)	KPY	
608	2A	*	A60-1047-02	PANEL (BLACK)	TEQ	
608	2A	*	A60-1076-02	PANEL (BLACK)	M	
608	2A	*	A60-1077-02	PANEL (GOLD)	C	
609	2A	*	A70-1114-05	REMOTE CONTROLLER (RC-R0905)		
615	2A	*	B01-0525-11	PANEL ESCUTCHEON	M	
615	2A	*	B01-0527-11	PANEL ESCUTCHEON	KPYTEQ	
615	2A	*	B01-0532-11	PANEL ESCUTCHEON	C	
616	2A	*	B10-2297-02	FRONT GLASS	KPYTEQ	
616	2A	*	B10-2298-02	FRONT GLASS	M	
616	2A	*	B10-2332-02	FRONT GLASS	C	
617	1A	*	B11-0295-03	COLOR FILTER	KPYMTE	
617	1A	*	B11-0295-03	COLOR FILTER	Q	
617	1A	*	B11-0344-13	COLOR FILTER	C	
618	2A		B43-0302-04	KENWOOD BADGE	KPYMTE	
618	2A		B43-0302-04	KENWOOD BADGE	Q	
618	2A		B43-0305-04	KENWOOD BADGE	C	
-			B46-0197-00	QUESTIONNAIRE CARD	K	
-			B46-0310-03	WARRANTY CARD	TEQ	
-			B46-0326-03	WARRANTY CARD	C	
-		*	B46-0330-03	WARRANTY CARD	KY	
-		*	B46-0336-03	WARRANTY CARD	P	
-			B58-0513-04	CAUTION CARD (PRESET220-240)	Y	
-			B58-0964-13	CAUTION CARD (UL)	KY	
-		*	B58-0965-13	CAUTION CARD (T,X PL)	T	
-		*	B58-0966-13	CAUTION CARD (ELM PL)	CE	
-		*	B58-0967-03	CAUTION CARD (P PL)	P	
-		*	B58-1526-03	CAUTION CARD (P4,ORI,A4,1(Q)	Q	
-			B59-1104-00	SERVICE DIRECTORY	Y	
-		*	B60-3008-00	INSTRUCTION MANUAL(ENGLISH)	KPY	
-		*	B60-3009-00	INSTRUCTION MANUAL(ENGLISH)	T	
-		*	B60-3010-00	INSTRUCTION MANUAL(ENGLISH)	CM	
-		*	B60-3011-00	INSTRUCTION MANUAL(FRENCH)	P	
-		*	B60-3012-00	INSTRUCTION MANUAL(FRENCH)	E	
-		*	B60-3013-00	INSTRUCTION MANUAL(SPANISH)	M	
-		*	B60-3014-00	INSTRUCTION MANUAL(ITALIAN)	E	
-		*	B60-3124-00	INSTRUCTION MANUAL(GERMAN)	E	
-		*	B60-3126-00	INSTRUCTION MANUAL(CHINESE)	M	
-		*	B60-3127-00	INSTRUCTION MANUAL(CHINESE)	C	
-		*	B60-3251-00	INSTRUCTION MANUAL(DUTCH)	E	
-		*	B60-3252-00	INSTRUCTION MANUAL(SPANISH)	E	
-		*	B60-3299-00	INSTRUCTION MANUAL(RUSSIAN)	Q	
-		*	B60-3300-00	INSTRUCTION MANUAL(POLISH)	Q	
⚠ 620	1A	*	E03-0343-05	AC PLUG ADAPTER	M	
⚠ 621	1C		E30-2579-05	AC POWER CORD	EQM	
⚠ 621	1C		E30-2739-05	AC POWER CORD	Y	
⚠ 621	1C		E30-2787-05	AC POWER CORD	KP	
⚠ 621	1C		E30-2791-05	AC POWER CORD	T	

L : Scandinavia
Y : PX(Far East, Hawaii)
Y : AAFES(Europe)
K : USA
T : Europe
X : Australia
P : Canada
E : Europe
M : Other Areas
R : Mexico
G : Germany
Q : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❷

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
⚠ 621	1C		E30-2825-05	AC POWER CORD	C	
625	2A	*	F19-1076-03	BLIND PLATE	C	
626	2C	*	F20-3503-14	INSULATING BOARD		
627	2C	*	F20-3504-03	INSULATING BOARD		
630	2A		G11-0155-14	SOFT TAPE (40X9X2)		
631	1A		G11-1167-04	SOFT TAPE		
-		*	H10-7312-02	POLYSTYRENE FOAMED FIXTURE		
-		*	H10-7313-02	POLYSTYRENE FOAMED FIXTURE		
-		*	H12-2328-04	PACKING FIXTURE	CTM	
-			H25-0232-04	PROTECTION BAG (235X350X0.03)	KPMCE	
-			H25-0232-04	PROTECTION BAG (235X350X0.03)	Q	
-			H25-0651-04	PROTECTION BAG	T	
-			H25-0661-04	PROTECTION BAG		
-		*	H50-2196-04	ITEM CARTON CASE	KPr	
-		*	H50-2197-04	ITEM CARTON CASE	E	
-		*	H50-2260-04	ITEM CARTON CASE	T	
-		*	H50-2402-04	ITEM CARTON CASE	M	
-		*	H50-2403-04	ITEM CARTON CASE	C	
-		*	H50-2480-04	ITEM CARTON CASE	Q	
640	2B,2C	*	J02-1147-13	FOOT (D=46,H=18.5)	KPMTE	
640	2B,2C	*	J02-1147-13	FOOT (D=46,H=18.5)	Q	
640	2B,2C	*	J02-1170-03	FOOT	C	
641	2C		J19-3300-05	UNIT HOLDER		
642	2C		J19-3324-15	UNIT HOLDER		
643	1A		J19-3645-05	ANT HOLDER		
644	2C	*	J19-3732-04	UNIT HOLDER		
645	1B	*	J19-5778-03	HOLDER		
⚠ 648	1C		J42-0083-05	POWER CORD BUSHING		
-			J61-0098-05	WIRE BAND		
-			J61-0307-05	WIRE BAND	M	
651	2A		K29-6249-04	KNOB	KPMTE	
651	2A		K29-6249-04	KNOB	Q	
651	2A	*	K29-6556-04	KNOB (GOLD)	C	
652	2A	*	K29-6251-04	KNOB	KPMTE	
652	2A	*	K29-6251-04	KNOB	Q	
652	2A	*	K29-6557-04	KNOB (GOLD)	C	
-			K27-2176-04	KNOB (BUTTON)	MTQ	
-			K27-2177-04	KNOB (BUTTON : GOLD)	C	
⚠ 660	1A	*	L07-2272-05	POWER TRANSFORMER	KP	
660	1A	*	L07-2273-05	POWER TRANSFORMER	YN	
⚠ 660	1A	*	L07-2274-05	POWER TRANSFORMER	TE	
⚠ 660	1A	*	L07-2355-05	POWER TRANSFORMER	C	
665	1A		T90-0176-05	T TYPE ANTENNA		
666	1A		T90-0185-05	ANTENNA ADAPTOR		
667	1A		T90-0820-05	LOOP ANTENNA		
			TUNER UNIT (X05-467X-XX)			
C1 ,2			CK73FB1H103K	CHIP C 0.010UF K		
C5			CK73FB1H102K	CHIP C 1000PF K		
C8			CK73FB1H103K	CHIP C 0.010UF K		
C9			CE04LW1C100M	ELECTRO 10UF 16WV		
C10			CK73FB1H473K	CHIP C 0.047UF K		

L : Scandinavia
Y : PX(Far East, Hawaii)
Y : AAFES(Europe)
K : USA
T : Europe
X : Australia
P : Canada
E : Europe
M : Other Areas
R : Mexico
G : Germany
Q : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❸

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
C11			CE04LW1H010M	ELECTRO 1.0UF 50WV		
C12			CE04LW1H2R2M	ELECTRO 2.2UF 50WV		
C13			CK73FB1H102K	CHIP C 1000PF K		
C14			CE04LW1H010M	ELECTRO 1.0UF 50WV		
C15			CC73FCH1H220J	CHIP C 22PF J		
C16			CE04LW1C100M	ELECTRO 10UF 16WV		
C17			CK73FB1H562K	CHIP C 5600PF K		
C18			CK73FB1H102K	CHIP C 1000PF K		
C19			CE04HW1E4R7M	NP-ELEC 4.7UF 25WV		
C20			CK73FB1E104K	CHIP C 0.10UF K		
C21 ,22			CQ93FMG1H113J	MYLAR 0.011UF J		
C23			CE04LW1H010M	ELECTRO 1.0UF 50WV		
C25			CE04LW1C100M	ELECTRO 10UF 16WV		
C26			CE04LW1C470M	ELECTRO 47UF 16WV		
C27			CE04LW1H010M	ELECTRO 1.0UF 50WV		
C28			CQ93FMG1H223J	MYLAR 0.022UF J		
C29			CE04LW1H2R2M	ELECTRO 2.2UF 50WV		
C30			CE04LW1C101M	ELECTRO 100UF 16WV		
C31			CE04LW1A470M	ELECTRO 47UF 10WV		
C32			CK73FB1H103K	CHIP C 0.010UF K		
C33			CC73FSL1H101J	CHIP C 100PF J		
C34 ,35			CK73FB1H102K	CHIP C 1000PF K		
C36			CC73FCH1H270J	CHIP C 27PF J		
C37			CC73FCH1H220J	CHIP C 22PF J		
C38			CK73FB1H471K	CHIP C 470PF K		
C57 ,58			CE04LW1H010M	ELECTRO 1.0UF 50WV		
C59 ,60			CE04LW1C100M	ELECTRO 10UF 16WV		
C61 ,62			CQ93FMG1H472J	MYLAR 4700PF J		CM
C63			CC73FCH1H220J	CHIP C 22PF J		
C64			CC73FCH1H330J	CHIP C 33PF J		
C65			CC73FCH1H040C	CHIP C 4.0PF C		
C67			CK73FB1H102K	CHIP C 1000PF K		
CN1			E40-4609-05	PIN ASSY		
J1			E70-0052-05	LOCK TERMINAL BOARD		
CF1 ,2			L72-0531-05	CERAMIC FILTER		
CF3			L72-0593-05	CERAMIC FILTER		
L1			L39-1348-05	COMBINATION COIL		
L2			L30-0911-05	AM IFT		
L3 ,4			L40-1091-17	SMALL FIXED INDUCTOR(1UH)		
X1		*	L77-2159-05	CRYSTAL RESONATOR(7.2MHZ)		
X2			L78-0637-05	RESONATOR (456KHZ)		
R1			RK73FB2A332J	CHIP R 3.3K J 1/10W		
R2			RK73FB2A681J	CHIP R 680 J 1/10W		
R3			RK73FB2A100J	CHIP R 10 J 1/10W		
R4 ,5			RK73FB2A331J	CHIP R 330 J 1/10W		
R6			RK73FB2A101J	CHIP R 100 J 1/10W		
R7			RK73FB2A473J	CHIP R 47K J 1/10W		
R8			RK73FB2A331J	CHIP R 330 J 1/10W		
R12			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R13			RK73FB2A473J	CHIP R 47K J 1/10W		
R15 ,16			RK73FB2A393J	CHIP R 39K J 1/10W		
R17			RK73FB2A271J	CHIP R 270 J 1/10W		
R18			RK73FB2A302J	CHIP R 3.0K J 1/10W		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❹

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
R19			RK73FB2A822J	CHIP R 8.2K J 1/10W		
R20 -23			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R24			RK73FB2A562J	CHIP R 5.6K J 1/10W		
R25			RD14NB2E101J	RD 100 J 1/4W		
R26			RD14NB2E561J	RD 560 J 1/4W		
R27 ,28			RK73FB2A103J	CHIP R 10K J 1/10W		
R29 ,30			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R31			RK73FB2A103J	CHIP R 10K J 1/10W		
R32			RK73FB2A122J	CHIP R 1.2K J 1/10W		
R33			RK73FB2A123J	CHIP R 12K J 1/10W		
R41			RS14KB3A271JFR	FL-PROOF RS 270 J 1W		
R42			RD14NB2E271J	RD 270 J 1/4W		
R44			RK73FB2A101J	CHIP R 100 J 1/10W		
R46			RK73FB2A104J	CHIP R 100K J 1/10W		
R47			RK73FB2A153J	CHIP R 15K J 1/10W		
R48 ,49			RK73FB2A473J	CHIP R 47K J 1/10W		
R50			RK73FB2A471J	CHIP R 470 J 1/10W		
R51 -54			RK73FB2A473J	CHIP R 47K J 1/10W		
R55 ,56			RK73FB2A154J	CHIP R 150K J 1/10W		
R59 ,60			RK73FB2A332J	CHIP R 3.3K J 1/10W		
R61			RK73FB2A103J	CHIP R 10K J 1/10W		
R62			RK73FB2A563J	CHIP R 56K J 1/10W		
R63			RK73FB2A821J	CHIP R 820 J 1/10W		
R64			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R65			RK73EB2B102J	CHIP R 1.0K J 1/8W		
R73			RK73FB2A681J	CHIP R 680 J 1/10W		
W101-106			R92-0670-05	CHIP R 0 OHM		
W108-113			R92-0670-05	CHIP R 0 OHM		
W115			R92-0670-05	CHIP R 0 OHM		
W201-212			R92-0679-05	CHIP R 0 OHM		
S1			S62-0034-05	SLIDE SWITCH		
D1 ,2			HSS104	DIODE		
D1 ,2			1SS133	DIODE		
D3 ,4			HZS5.1N(B2)	ZENER DIODE		
D3 ,4			RD5.1ES(B2)	ZENER DIODE		
D8			HSS104	DIODE		
D8			1SS133	DIODE		
D10			MA111	DIODE		
D12			HZS3.3N(B2)	ZENER DIODE		
D12			RD3.3ES(B2)	ZENER DIODE		
D13			HZS2.7N(B2)	ZENER DIODE		
D13			RD2.7ES(B2)	ZENER DIODE		
IC1			LA1832	ANALOGUE IC		
IC2			LC72131	MOS-IC		
IC4			NJM4565M	IC(OP AMP X2)		
Q1			2SC2714(R,O)	TRANSISTOR		
Q3			2SA1576A(R,S)	TRANSISTOR		
Q3			2SA1586(Y,GR)	TRANSISTOR		
Q5			2SC4081(R,S)	TRANSISTOR		
Q5			2SC4116(Y,GR)	TRANSISTOR		
Q6			2SA1576A(R,S)	TRANSISTOR		
Q6			2SA1586(Y,GR)	TRANSISTOR		
Q7 ,8			2SD1757K	TRANSISTOR		
Q9 ,10			2SC4081(R,S)	TRANSISTOR		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❺

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
Q9 ,10			2SC4116(Y,GR)	TRANSISTOR		
A1			W02-2582-05	FM FRONT-END ASSY		
TUNER UNIT (X05-468X-XX)						
C1			CE04LW1C470M	ELECTRO 47UF 16WV		
C2			CE04LW1H010M	ELECTRO 1.0UF 50WV		
C3			CK73FB1H103K	CHIP C 0.010UF K		
C5 -10			CK73FB1H103K	CHIP C 0.010UF K		
C30			CK73EB1E473K	CHIP C 0.047UF K		
C31			CE04LW1C470M	ELECTRO 47UF 16WV		
C32			CK73FB1H103K	CHIP C 0.010UF K		
C33			CE04LW1C100M	ELECTRO 10UF 16WV		
C34			CK73FB1H103K	CHIP C 0.010UF K		
C35			CE04LW1C100M	ELECTRO 10UF 16WV		
C36			CK73FB1E473K	CHIP C 0.047UF K		
C37			CK73FB1H103K	CHIP C 0.010UF K		
C38			C90-3217-05	ELECTRO 10UF 10WV		
C40			C90-3253-05	ELECTRO 1.0UF 50WV		
C41			C90-3251-05	ELECTRO 0.47UF 50WV		
C42			C90-3240-05	ELECTRO 2.2UF 35WV		
C43			CE04LW1HR47M	ELECTRO 0.47UF 50WV		
C44			CK73FB1E473K	CHIP C 0.047UF K		
C45			CC73FCH1H220J	CHIP C 22PF J		
C46			CE04LW1A101M	ELECTRO 100UF 10WV		
C47			CK73FB1H103K	CHIP C 0.010UF K		
C48			CC73FSL1H101J	CHIP C 100PF J		
C49			CE04LW1H010M	ELECTRO 1.0UF 50WV		
C50			CK73FB1H152K	CHIP C 1500PF K		TEQ
C51 ,52			C90-3217-05	ELECTRO 10UF 10WV		
C53 ,54			CK73FB1H223K	CHIP C 0.022UF K		YTEQ
C53 ,54			CK73FB1H333K	CHIP C 0.033UF K		KP
C55 ,56			CE04LW1H2R2M	ELECTRO 2.2UF 50WV		
C57 ,58			CK73FB1H822K	CHIP C 8200PF K		
C59			CC73FSL1H101J	CHIP C 100PF J		
C60			CK73FB1E104K	CHIP C 0.10UF K		
C61			CK73FB1H103K	CHIP C 0.010UF K		
C64			CK73FB1H333K	CHIP C 0.033UF K		
C66			CC73FCH1H060D	CHIP C 6.0PF D		
C67			CC73FCH1H220J	CHIP C 22PF J		
C68			CC73FSL1H020C	CHIP C 2.0PF C		
C70			CC73FSL1H101J	CHIP C 100PF J		
C71 ,72			CK73FB1H103K	CHIP C 0.010UF K		Y
C73			CK73FB1H681K	CHIP C 680PF K		KPY
C81			CC73FCH1H220J	CHIP C 22PF J		
C82			CC73FCH1H270J	CHIP C 27PF J		
C84			CK73FB1H102K	CHIP C 1000PF K		
C85			CC73FSL1H101J	CHIP C 100PF J		
C86			CK73FB1H102K	CHIP C 1000PF K		
C87			CE04LW1C100M	ELECTRO 10UF 16WV		
C89			CE04LW1C470M	ELECTRO 47UF 16WV		
C90			CE04LW1H2R2M	ELECTRO 2.2UF 50WV		
C91			CK73FB1H223K	CHIP C 0.022UF K		
C92			CC73FSL1H471J	CHIP C 470PF J		
C93			CK73FB1H103K	CHIP C 0.010UF K		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❺

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
C98			CK73FB1H102K	CHIP C 1000PF K		
CN1			E40-4609-05	PIN ASSY		
CN2			E40-4871-05	PIN ASSY		
J1			E70-0052-05	LOCK TERMINAL BOARD		
CF1 ,2			L72-0536-05	CERAMIC FILTER	TEQ	
CF1 ,2			L72-0596-05	CERAMIC FILTER	KPY	
L31		*	L30-0943-05	FM IFT		
L32		*	L30-0944-05	FM IFT		
L33			L30-0911-05	AM IFT		
L34			L79-1240-05	LC FILTER	TEQ	
L35 ,36			L79-1239-05	LC FILTER		
L61			L40-1091-17	SMALL FIXED INDUCTOR(1UH)		
L62			L39-1351-05	COMBINATION COIL		
L63			L40-1001-17	SMALL FIXED INDUCTOR(10UH,K)		
L81			L40-1091-17	SMALL FIXED INDUCTOR(1UH)		
X31			L78-0637-05	RESONATOR (456KHZ)		
X81			L77-2159-05	CRYSTAL RESONATOR(7.2MHZ)		
R1			RD14NB2E221J	RD 220 J 1/4W		
R2			RK73FB2A221J	CHIP R 220 J 1/10W		
R3			RK73FB2A182J	CHIP R 1.8K J 1/10W	TEQ	
R3			RK73FB2A561J	CHIP R 560 J 1/10W	KPY	
R4			RK73FB2A222J	CHIP R 2.2K J 1/10W		
R5			RK73FB2A103J	CHIP R 10K J 1/10W		
R7			RK73FB2A221J	CHIP R 220 J 1/10W		
R8			RK73FB2A681J	CHIP R 680 J 1/10W		
R9			RK73FB2A470J	CHIP R 47 J 1/10W		
R10			RK73FB2A101J	CHIP R 100 J 1/10W		
R11			RK73FB2A331J	CHIP R 330 J 1/10W		
R12			RK73FB2A101J	CHIP R 100 J 1/10W		
R13			RK73FB2A681J	CHIP R 680 J 1/10W		
R14			RK73FB2A332J	CHIP R 3.3K J 1/10W		
R15			RK73FB2A331J	CHIP R 330 J 1/10W		
R16			RK73FB2A100J	CHIP R 10 J 1/10W	TEQ	
R16			RK73FB2A150J	CHIP R 15 J 1/10W	KPY	
R17			RK73FB2A331J	CHIP R 330 J 1/10W		
R18			RK73FB2A391J	CHIP R 390 J 1/10W		
R19			RK73FB2A681J	CHIP R 680 J 1/10W		
R20			RK73FB2A100J	CHIP R 10 J 1/10W	TEQ	
R20			RK73FB2A150J	CHIP R 15 J 1/10W	KPY	
R21			RK73FB2A101J	CHIP R 100 J 1/10W		
R22			RK73FB2A100J	CHIP R 10 J 1/10W		
R31		*	RS14KB3A151JFR	FL-PROOF RS 150 J 1W		
R32			RK73EB2B432J	CHIP R 4.3K J 1/8W		
R33			RK73FB2A302J	CHIP R 3.0K J 1/10W		
R34			RK73FB2A822J	CHIP R 8.2K J 1/10W		
R35			RK73FB2A333J	CHIP R 33K J 1/10W		
R36			RK73FB2A393J	CHIP R 39K J 1/10W		
R37			RK73FB2A332J	CHIP R 3.3K J 1/10W		
R38			RK73FB2A333J	CHIP R 33K J 1/10W		
R39			RK73FB2A823J	CHIP R 82K J 1/10W		
R40			RK73FB2A202J	CHIP R 2.0K J 1/10W		
R41			RK73FB2A222J	CHIP R 2.2K J 1/10W		
R42			RK73FB2A202J	CHIP R 2.0K J 1/10W	TEQ	

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

KR-V999D/1090VR
PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❼

Ref. No	Address	New Parts	Parts No.	Description			Destination	Remarks
R43 ,44			RK73FB2A222J	CHIP R	2.2K	J 1/10W		
R45 ,46			RK73FB2A102J	CHIP R	1.0K	J 1/10W		
R47 ,48			RK73FB2A392J	CHIP R	3.9K	J 1/10W		
R49			RK73FB2A473J	CHIP R	47K	J 1/10W		
R51			RK73FB2A392J	CHIP R	3.9K	J 1/10W		
R52			RK73FB2A104J	CHIP R	100K	J 1/10W		
R53			RK73FB2A102J	CHIP R	1.0K	J 1/10W		
R55			RK73FB2A562J	CHIP R	5.6K	J 1/10W		
R56 ,57			RK73FB2A101J	CHIP R	100	J 1/10W		
R59			RK73FB2A272J	CHIP R	2.7K	J 1/10W		
R67			RK73FB2A104J	CHIP R	100K	J 1/10W		
R69			RK73FB2A103J	CHIP R	10K	J 1/10W		
R80			RK73EB2B102J	CHIP R	1.0K	J 1/8W		
R81 -83			RK73FB2A102J	CHIP R	1.0K	J 1/10W		
R84			RK73FB2A103J	CHIP R	10K	J 1/10W		
R85 -88			RK73FB2A102J	CHIP R	1.0K	J 1/10W		
R89			RD14NB2E101J	RD	100	J 1/4W		
R90			RK73FB2A562J	CHIP R	5.6K	J 1/10W		
R91			RK73FB2A222J	CHIP R	2.2K	J 1/10W		
R92			RK73FB2A123J	CHIP R	12K	J 1/10W		
R93			RK73FB2A122J	CHIP R	1.2K	J 1/10W		
R94			RD14NB2E561J	RD	560	J 1/4W		
R101,102			RK73FB2A102J	CHIP R	1.0K	J 1/10W		
R103			RK73FB2A821J	CHIP R	820	J 1/10W		
R104			RK73FB2A473J	CHIP R	47K	J 1/10W		
R105			RK73FB2A822J	CHIP R	8.2K	J 1/10W		
W51 -55			R92-0670-05	CHIP R	0 OHM			
W57 ,58			R92-0679-05	CHIP R	0 OHM			
W59			R92-0670-05	CHIP R	0 OHM			
W61			R92-0670-05	CHIP R	0 OHM			
W62 -64			R92-0679-05	CHIP R	0 OHM			
W66 ,67			R92-0679-05	CHIP R	0 OHM			
W71			R92-0670-05	CHIP R	0 OHM			
W72			R92-0670-05	CHIP R	0 OHM		Y	
W75			R92-0670-05	CHIP R	0 OHM			
W81			R92-0679-05	CHIP R	0 OHM			
W83			R92-0679-05	CHIP R	0 OHM			
W85			R92-0670-05	CHIP R	0 OHM			
S1			S62-0034-05	SLIDE SWITCH			Y	
D1 ,2			HSS104	DIODE				
D1 ,2			1SS133	DIODE				
D31			HZS8.2N(B2)	ZENER DIODE				
D31			RD8.2ES(B2)	ZENER DIODE				
D32			HSS104	DIODE				
D32			1SS133	DIODE				
D61 ,62			HSS104	DIODE				
D61 ,62			1SS133	DIODE				
D81			HZS5.1N(B2)	ZENER DIODE				
D81			RD5.1ES(B2)	ZENER DIODE				
D101			HZS3.3N(B2)	ZENER DIODE				
D101			RD3.3ES(B2)	ZENER DIODE				
D102			HZS2.7N(B2)	ZENER DIODE				
D102			RD2.7ES(B2)	ZENER DIODE				
IC1			LA1836	ANALOGUE IC				

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❽

Ref. No	Address	New Parts	Parts No.	Description			Destination	Remarks
IC2			LC72131	MOS-IC				
Q1 ,2			2SC4081(R,S)	TRANSISTOR				
Q1 ,2			2SC4116(Y,GR)	TRANSISTOR				
Q3			2SA1576A(R,S)	TRANSISTOR				
Q3			2SA1586(Y,GR)	TRANSISTOR				
Q4			2SC4081(R,S)	TRANSISTOR				
Q4			2SC4116(Y,GR)	TRANSISTOR				
Q31 -34			2SC4081(R,S)	TRANSISTOR				
Q31 -34			2SC4116(Y,GR)	TRANSISTOR				
Q81			2SA1576A(R,S)	TRANSISTOR				
Q81			2SA1586(Y,GR)	TRANSISTOR				
Q101,102			2SD1757K	TRANSISTOR				
Q103			2SA1576A(R,S)	TRANSISTOR				
Q103			2SA1586(Y,GR)	TRANSISTOR				
A1			W02-2582-05	FM FRONT-END ASSY			KPY	
A1		*	W02-2584-05	FM FRONT-END ASSY			TE	
A1		*	W02-2586-05	FM FRONT-END ASSY			Q	
POWER AMPLIFIER UNIT (X07-290X-XX)								
C1 -8		*	CK45FB1H332KMM	CERAMIC	3300PF	K		
C9 -12			CK45FF1H103ZMM	CERAMIC	0.010UF	Z		
C13 ,14			CE04KW2A2R2M	ELECTRO	2.2UF	100WV		
C17 ,18			CE04KW2A2R2M	ELECTRO	2.2UF	100WV		
C21 ,22			CE04KW2A2R2M	ELECTRO	2.2UF	100WV		
C25 ,26			CE04KW2A2R2M	ELECTRO	2.2UF	100WV		
C29 -36			CF92FV1H224J	MF-C	0.22UF	J		
C37 -42			CQ93FMG1H472J	MYLAR	4700PF	J		
C43 ,44		*	CK45FB1H332KMM	CERAMIC	3300PF	K		
C45		*	CK45FF1H103ZMM	CERAMIC	0.010UF	Z		
C46 -49			CE04KW2A2R2M	ELECTRO	2.2UF	100WV		
C50 ,51			CF92FV1H224J	MF-C	0.22UF	J		
C52 -58			CQ93FMG1H102J	MYLAR	1000PF	J		
C59			CQ93FMG1H472J	MYLAR	4700PF	J		
C60			CE04KW1H100M	ELECTRO	10UF	50WV		
C61			CE04KW1A101M	ELECTRO	100UF	10WV		
C62			CE04KW0J331M	ELECTRO	330UF	6.3WV		
C63			CE04KW1V220M	ELECTRO	22UF	35WV		
C64			CE04KW1V470M	ELECTRO	47UF	35WV		
C65			CE04KW1H3R3M	ELECTRO	3.3UF	50WV		
C66 ,67			C90-3600-05	ELECTRO	15000UF	82WV		
C68 -73		*	CK45FE2H103PMM	CERAMIC	0.010UF	P		
C74			CQ93FMG1H102J	MYLAR	1000PF	J		
C80			CE04KW1A470M	ELECTRO	47UF	10WV		
C81			CE04KW1A221M	ELECTRO	220UF	10WV		
C82			CE04DW1E331M	ELECTRO	330UF	25WV		
C83			CE04KW1V4R7M	ELECTRO	4.7UF	35WV		
C84			CK45FF1H103ZMM	CERAMIC	0.010UF	Z		
⚠ C85			C91-1444-05	MF	0.047UF	250VAC		
⚠ C86			C91-1488-05	MF	6800PF	250VAC		
C88		*	CK45FF1H103ZMM	CERAMIC	0.010UF	Z		
CN5			E40-4245-05	PIN ASSY			CTKPY	
CN6			E40-4294-05	FLAT CABLE CONNECTOR				
CN7			E40-4808-05	PIN ASSY				
CN8			E40-4293-05	FLAT CABLE CONNECTOR				
CN11			E40-3247-05	PIN ASSY				

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❾

Ref. No	Address	New Parts	Parts No.	Description			Destination	Remarks
⚠ CN14			E40-3385-05	PIN ASSY			MCTEQ	
CN15-19			E40-4871-05	PIN ASSY				
⚠ J1			E03-0148-05	AC OUTLET			KPY	
⚠ J1			E03-0149-05	AC OUTLET			EQM	
⚠ J1			E03-0310-05	AC OUTLET			T	
⚠ J1		*	E03-0330-05	AC OUTLET			C	
J2			E70-0055-05	SCREW TERMINAL BOARD				
J3			E70-0049-05	SCREW TERMINAL BOARD				
P2		*	E29-1625-04	LEAD PLATE				
⚠ F1			F05-3121-05	FUSE (SEMKO)	(250V T3.15AL)		CTEQ	
⚠ F1			F50-0078-05	FUSE(5X20)			KP	
⚠ F1 ,2			F05-3121-05	FUSE (SEMKO)	(250V T3.15AL)		MY	
⚠ F3			F05-2525-05	FUSE (SEMKO)	(250V T2.5AL)		E	
-			J61-0098-05	WIRE BAND				
CN1 ,2			J13-0075-05	FUSE CLIP				
CN3 ,4			J13-0075-05	FUSE CLIP			MY	
CN9 ,10			J13-0075-05	FUSE CLIP			E	
E7 -9			J11-0808-05	WIRE CLAMPER				
L1 -5			L39-0085-05	PHASE COMPENSATION COIL				
⚠ T1			L07-0864-05	POWER TRANSFORMER			KP	
⚠ T1			L07-0865-05	POWER TRANSFORMER			YMY	
⚠ T1			L07-0867-05	POWER TRANSFORMER			TE	
⚠ T1			L07-2114-05	POWER TRANSFORMER			CQ	
R1 -4			RD14NB2E151J	RD	150	J 1/4W		
R5 -12			RD14NB2E470J	RD	47	J 1/4W		
R13 -20			RD14NB2E101J	RD	100	J 1/4W		
R21 -28			RD14NB2E332J	RD	3.3K	J 1/4W		
R49 -52		*	RS14KB3A2R7JFR	FL-PROOF RS	2.7	J 1W		
R53 -56			RD14NB2E220J	RD	22	J 1/4W		
R57			RD14NB2E151J	RD	150	J 1/4W		
R58 ,59			RD14NB2E470J	RD	47	J 1/4W		
R60 ,61			RD14NB2E101J	RD	100	J 1/4W		
R62 ,63			RD14NB2E332J	RD	3.3K	J 1/4W		
R69		*	RS14KB3A2R7JFR	FL-PROOF RS	2.7	J 1W		
R70			RD14NB2E220J	RD	22	J 1/4W		
⚠ R71 ,72			RD14NB2E391J	RD	390	J 1/4W		
⚠ R73		*	RS14KB3A181JFR	FL-PROOF RS	180	J 1W		
⚠ R74			RD14NB2E102J	RD	1.0K	J 1/4W		
R84 ,85			RD14NB2E102J	RD	1.0K	J 1/4W		
⚠ R88		*	RS14KB3A471JFR	FL-PROOF RS	470	J 1W		
⚠ R93			R92-1844-05	CARBON	3.3M	J 1/2W	KP	
R100,101			RD14NB2E3R9J	RD	3.9	J 1/4W		
VR1 -5			R12-0605-05	TRIMMING POT.(220 7t)				
⚠ K1			S76-0065-05	MAGNETIC RELAY			KP	
⚠ K1		*	S76-0070-05	MAGNETIC RELAY			MYCTEQ	
K2 -5			S76-0061-05	MAGNETIC RELAY				
⚠ K6			S76-0063-05	MAGNETIC RELAY				
K7			S76-0028-05	MAGNETIC RELAY				
⚠ S2			S31-3010-05	SLIDE SWITCH			MY	
⚠ TS1			S59-1080-05	THERMAL SWITCH				
⚠ TS2			S79-0020-05	THERMAL SWITCH				
D1 -28			HSS104A	DIODE				
D1 -28			1SS131	DIODE				
D29			HZS11N(B2)	ZENER DIODE				

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❿

Ref. No	Address	New Parts	Parts No.	Description			Destination	Remarks
D29			RD11ES(B2)	ZENER DIODE				
D30			HZS15N(B2)	ZENER DIODE				
D30			RD15ES(B2)	ZENER DIODE				
D31			HSS104A	DIODE				
D31			1SS131	DIODE				
⚠ D32 ,33			D5FB20-4002-L2	DIODE				
D34			HZS6.2N(B2)	ZENER DIODE				
D34			RD6.2ES(B2)	ZENER DIODE				
⚠ D35 -37			HSS104A	DIODE				
⚠ D35 -37			1SS131	DIODE				
D38 -41			S5688B	DIODE				
D38 -41			1SR139-400	DIODE				
D42			HZS2.7N(B2)	ZENER DIODE				
D42			RD2.7ES(B2)	ZENER DIODE				
D43			HSS104A	DIODE				
D43			1SS131	DIODE				
D44			HZS5.1S(B2)	ZENER DIODE				
D44			RD5.1JS(B2)	ZENER DIODE				
D45 -47			HSS104A	DIODE				
D45 -47			1SS131	DIODE				
⚠ Q1 -4		*	TRAITR4N*5	TRANSISTOR				
⚠ Q5 -8		*	TRAITR4P*5	TRANSISTOR				
Q9 -12			2SC2631(R,S)	TRANSISTOR				
Q13 -16			2SA992(F,E)	TRANSISTOR				
Q17		*	TRAITR4N*5	TRANSISTOR				
Q18		*	TRAITR4P*5	TRANSISTOR				
Q19			2SC2631(R,S)	TRANSISTOR				
Q20 ,21			2SA992(F,E)	TRANSISTOR				
Q22 ,23			2SC1845(F,E)	TRANSISTOR				
Q24			2SD2012	TRANSISTOR				
⚠ Q24			2SD2061(E,F)	TRANSISTOR				
Q25			DTC143TSA	DIGITAL TRANSISTOR				
Q25			UN4216	DIGITAL TRANSISTOR				
Q26 ,27			DTC113ZSA	DIGITAL TRANSISTOR				
Q26 ,27			UN4219	DIGITAL TRANSISTOR				
Q28			DTC124ESA	DIGITAL TRANSISTOR				
Q28			UN4212	DIGITAL TRANSISTOR				
Q29 -33			DTC113ZSA	DIGITAL TRANSISTOR				
Q29 -33			UN4219	DIGITAL TRANSISTOR				
Q34			2SC2003(L,K)	TRANSISTOR				
⚠ Q35			2SC3940A(R,S)	TRANSISTOR				
⚠ Q35			2SD863(E,F)	TRANSISTOR				
Q36			DTC124ESA	DIGITAL TRANSISTOR				
Q36			UN4212	DIGITAL TRANSISTOR				
Q37			DTC143TSA	DIGITAL TRANSISTOR				
Q37			UN4216	DIGITAL TRANSISTOR				
Q38			DTC124ESA	DIGITAL TRANSISTOR				
Q38			UN4212	DIGITAL TRANSISTOR				
SURROUND UNIT (X08-273X-XX)								
C1 ,2			CC73FSL1H821J	CHIP C	820PF	J		
C3 ,4			CC73FSL1H181J	CHIP C	180PF	J		
C5 ,6			CQ93FMG1H332J	MYLAR	3300PF	J		
C7 ,8			CE04KW1E470M	ELECTRO	47UF	25WV		
C9 ,10			CC73FSL1H101J	CHIP C	100PF	J		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert. ⑪

Ref. No	Address	New Parts	Parts No.	Description			Destination	Remarks
C11 ,12			CQ93FMG1H152J	MYLAR	1500PF	J		
C13			CK73FB1H103K	CHIP C	0.010UF	K		
C14			CK73FB1H102K	CHIP C	1000PF	K		
C15 ,16			CE04KW1H220M	ELECTRO	22UF	50WV		
C17			CK73FB1H103K	CHIP C	0.010UF	K		
C18			CK73FB1H102K	CHIP C	1000PF	K		
C19			CC73FSL1H101J	CHIP C	100PF	J		
C21 ,22			CC73FSL1H821J	CHIP C	820PF	J		
C23			CC73FSL1H181J	CHIP C	180PF	J		
C24			CQ93FMG1H471J	MYLAR	470PF	J		
C25			CQ93FMG1H332J	MYLAR	3300PF	J		
C26			CQ93FMG1H473J	MYLAR	0.047UF	J		
C27			CQ93FMG1H152J	MYLAR	1500PF	J		
C28			CQ93FMG1H183J	MYLAR	0.018UF	J		
C29			CC73FSL1H101J	CHIP C	100PF	J		
C30			CQ93FMG1H472J	MYLAR	4700PF	J		
C31 ,32			CE04KW1H220M	ELECTRO	22UF	50WV		
C33			CK73FB1H103K	CHIP C	0.010UF	K		
C34			CK73FB1H102K	CHIP C	1000PF	K		
C35			CK73FB1H103K	CHIP C	0.010UF	K		
C36			CK73FB1H102K	CHIP C	1000PF	K		
C37 ,38			CE04KW1H100M	ELECTRO	10UF	50WV		
C39 ,40			CC73FSL1H121J	CHIP C	120PF	J		
C41 ,42			CC73FSL1H821J	CHIP C	820PF	J		
C43 ,44			CC73FSL1H181J	CHIP C	180PF	J		
C45 ,46			CQ93FMG1H332J	MYLAR	3300PF	J		
C47 ,48			CC73FSL1H101J	CHIP C	100PF	J		
C49			CK73FB1H103K	CHIP C	0.010UF	K		
C50			CK73FB1H102K	CHIP C	1000PF	K		
C51 ,52			CQ93FMG1H152J	MYLAR	1500PF	J		
C53			CK73FB1H103K	CHIP C	0.010UF	K		
C54			CK73FB1H102K	CHIP C	1000PF	K		
C55 -60			CE04KW1H100M	ELECTRO	10UF	50WV		
C61 -64			CF92FV1H224J	MF-C	0.22UF	J		
C65 ,66			CC73FSL1H101J	CHIP C	100PF	J		
C67 ,68			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C81 -84			CF92FV1H224J	MF-C	0.22UF	J		
C85 ,86			CC73FSL1H101J	CHIP C	100PF	J		
C87 ,88			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C89			CK73FB1H103K	CHIP C	0.010UF	K		
C90			CK73FB1H102K	CHIP C	1000PF	K		
C91			CK73FB1H103K	CHIP C	0.010UF	K		
C92			CF92FV1H224J	MF-C	0.22UF	J		
C93			CK73FB1H102K	CHIP C	1000PF	K		
C94			CF92FV1H224J	MF-C	0.22UF	J		
C95			CC73FSL1H101J	CHIP C	100PF	J		
C96			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C97			CC73FSL1H101J	CHIP C	100PF	J		
C98			CC73FSL1H470J	CHIP C	47PF	J		
C99			CF92FV1H564J	MF-C	0.56UF	J		
C100			CF92FV1H274J	MF-C	0.27UF	J		
C101,102			CE04KW1H220M	ELECTRO	22UF	50WV		
C103,104			CE04KW1E470M	ELECTRO	47UF	25WV		
C105			CF92FV1H274J	MF-C	0.27UF	J		
C106			CE04KW1E470M	ELECTRO	47UF	25WV		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia
⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert. ⑫

Ref. No	Address	New Parts	Parts No.	Description			Destination	Remarks
C107,108			CC73FCH1H220J	CHIP C	22PF	J		
C109			CQ93FMG1H562J	MYLAR	5600PF	J		
C110-112			CE04KW1E470M	ELECTRO	47UF	25WV		
C113,114			CC73FCH1H220J	CHIP C	22PF	J		
C115			CQ93FMG1H562J	MYLAR	5600PF	J		
C116			CE04KW1H220M	ELECTRO	22UF	50WV		
C117,118			CC73FSL1H121J	CHIP C	120PF	J		
C119,120			CE04KW1E470M	ELECTRO	47UF	25WV		
C121			CK73FB1H102K	CHIP C	1000PF	K		
C122,123			CK73FB1H103K	CHIP C	0.010UF	K		
C124			CK73FB1H102K	CHIP C	1000PF	K		
C125			CF92FV1H564J	MF-C	0.56UF	J		
C126			CK73FB1E104K	CHIP C	0.10UF	K		
C156			CE04KW1H220M	ELECTRO	22UF	50WV		
C157			CK73FB1H103K	CHIP C	0.010UF	K		
C158			CK73FB1H102K	CHIP C	1000PF	K		
C159,160			CE04KW1E470M	ELECTRO	47UF	25WV		
C161			CK73FB1H103K	CHIP C	0.010UF	K		
C162			CK73FB1H102K	CHIP C	1000PF	K		
C163,164			CC73FSL1H101J	CHIP C	100PF	J		
C165,166			CE04KW1H100M	ELECTRO	10UF	50WV		
C167,168			CC73FSL1H821J	CHIP C	820PF	J		
C169			CE04KW1H220M	ELECTRO	22UF	50WV		
C170			CK73FB1H102K	CHIP C	1000PF	K		
C171,172			CC73FSL1H821J	CHIP C	820PF	J		
C173,174			CC73FSL1H221J	CHIP C	220PF	J		
C181			CK73FB1H103K	CHIP C	0.010UF	K		
C182			CK73FB1H102K	CHIP C	1000PF	K		
C183			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C184			CC73FSL1H101J	CHIP C	100PF	J		
C185			CK73FB1H103K	CHIP C	0.010UF	K		
C186			CK73FB1H102K	CHIP C	1000PF	K		
C187			CK73FB1H103K	CHIP C	0.010UF	K		
C188			CK73FB1H102K	CHIP C	1000PF	K		
C189			CK73FB1H103K	CHIP C	0.010UF	K		
C190			CK73FB1H102K	CHIP C	1000PF	K		
C301			CE04KW1A101M	ELECTRO	100UF	10WV		
C302			CE04KW1E470M	ELECTRO	47UF	25WV		
C303,304			CK73FB1H102K	CHIP C	1000PF	K		
C305,306			CE04KW1A101M	ELECTRO	100UF	10WV		
C307,308			CK73FB1H102K	CHIP C	1000PF	K		
C309			CE04KW1A101M	ELECTRO	100UF	10WV		
C310			CK73FB1H102K	CHIP C	1000PF	K		
C311			CE04KW1A101M	ELECTRO	100UF	10WV		
C312			CK73FB1E104K	CHIP C	0.10UF	K		
C313			CC73FCH1H102J	CHIP C	1000PF	J		
C314			CK73FB1H822K	CHIP C	8200PF	K		
C315			CC73FCH1H070D	CHIP C	7.0PF	D		
C316			CC73FCH1H090D	CHIP C	9.0PF	D		
C317			CK73FB1E104K	CHIP C	0.10UF	K		
C318			CK73FB1H102K	CHIP C	1000PF	K		
C319			CC73FSL1H221J	CHIP C	220PF	J		
C320			CC73FCH1H090D	CHIP C	9.0PF	D		
C321			CK73FB1H102K	CHIP C	1000PF	K		
C322			CC73FCH1H070D	CHIP C	7.0PF	D		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia
⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert. ⑬

Ref. No	Address	New Parts	Parts No.	Description			Destination	Remarks
C323-325			CC73FCH1H220J	CHIP C	22PF	J		
C327			CC73FCH1H090D	CHIP C	9.0PF	D		
C328			CC73FCH1H070D	CHIP C	7.0PF	D		
C329			CK73FB1H102K	CHIP C	1000PF	K		
C330			CK73FB1E104K	CHIP C	0.10UF	K		
C331			CC73FCH1H090D	CHIP C	9.0PF	D		
C332			CC73FCH1H070D	CHIP C	7.0PF	D		
C333			CK73FB1H822K	CHIP C	8200PF	K		
C334			CK73FB1H103K	CHIP C	0.010UF	K		
C335			CK73FB1E104K	CHIP C	0.10UF	K		
C336			CK73FB1H103K	CHIP C	0.010UF	K		
C337			CC73FSL1H101J	CHIP C	100PF	J		
C338,339			CK73FB1H102K	CHIP C	1000PF	K		
C340			CE04KW1A101M	ELECTRO	100UF	10WV		
C341			CK73FB1H102K	CHIP C	1000PF	K		
C342			CE04KW1E470M	ELECTRO	47UF	25WV		
C343			CK73FB1E104K	CHIP C	0.10UF	K		
C344			CK73FB1H103K	CHIP C	0.010UF	K		
C345			CK73FB1H102K	CHIP C	1000PF	K		
C347,348			CK73FB1H102K	CHIP C	1000PF	K		
C349			CC73FCH1H220J	CHIP C	22PF	J		
C361-363			CK73FB1E104K	CHIP C	0.10UF	K		
C364,365			CC73FSL1H101J	CHIP C	100PF	J		
C366			CE04KW1E470M	ELECTRO	47UF	25WV		
C367			CK73FF1C224Z	CHIP C	0.22UF	Z		
C368,369			CK73FB1H102K	CHIP C	1000PF	K		
C370			CC73FCH1H220J	CHIP C	22PF	J		
C371,372			CC73FSL1H470J	CHIP C	47PF	J		
C373			CK73FB1H102K	CHIP C	1000PF	K		
C374			CE04KW1E470M	ELECTRO	47UF	25WV		
C401,402			CK73FB1E104K	CHIP C	0.10UF	K	KP	
C403			CK73FB1H103K	CHIP C	0.010UF	K		
C404			CK73FB1H102K	CHIP C	1000PF	K	KP	
C405,406			CK73FB1E104K	CHIP C	0.10UF	K	KP	
C407			CK73FB1H102K	CHIP C	1000PF	K	KP	
C501,502			CE04KW1H100M	ELECTRO	10UF	50WV		
C503			CK73FB1H102K	CHIP C	1000PF	K		
C504			CK73FB1H103K	CHIP C	0.010UF	K		
C505,506			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C509,510			CC73FSL1H151J	CHIP C	150PF	J		
C511,512			CC73FSL1H101J	CHIP C	100PF	J		
C513,514			CE04KW1H220M	ELECTRO	22UF	50WV		
C515			CK73FB1H102K	CHIP C	1000PF	K		
C516			CK73FB1H103K	CHIP C	0.010UF	K		
C517,518			CE04KW1H220M	ELECTRO	22UF	50WV		
C519,520			CC73FCH1H220J	CHIP C	22PF	J		
C521			CK73FB1H102K	CHIP C	1000PF	K		
C522			CK73FB1H103K	CHIP C	0.010UF	K		
C525-528			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C529,530			CC73FCH1H220J	CHIP C	22PF	J		
C533			CK73FB1H102K	CHIP C	1000PF	K		
C534			CK73FB1H103K	CHIP C	0.010UF	K		
C535-538			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C539,540			CC73FSL1H151J	CHIP C	150PF	J		
C541,542			CC73FSL1H101J	CHIP C	100PF	J		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia
⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert. ⑭

Ref. No	Address	New Parts	Parts No.	Description			Destination	Remarks
C543,544			CE04KW1H220M	ELECTRO	22UF	50WV		
C545			CK73FB1H102K	CHIP C	1000PF	K		
C546			CK73FB1H103K	CHIP C	0.010UF	K		
C547,548			CE04KW1H220M	ELECTRO	22UF	50WV		
C549,550			CC73FCH1H220J	CHIP C	22PF	J		
C551			CK73FB1H102K	CHIP C	1000PF	K		
C552			CK73FB1H103K	CHIP C	0.010UF	K		
C553,554			CE04KW1H0R1M	ELECTRO	0.1UF	50WV		
C555,556			CK73FB1H152K	CHIP C	1500PF	K		
C559,560			CC73FCH1H220J	CHIP C	22PF	J		
C563			CK73FB1H102K	CHIP C	1000PF	K		
C564			CK73FB1H103K	CHIP C	0.010UF	K		
C565-568			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C569,570			CC73FSL1H151J	CHIP C	150PF	J		
C571,572			CC73FSL1H101J	CHIP C	100PF	J		
C573,574			CE04KW1H220M	ELECTRO	22UF	50WV		
C575			CK73FB1H102K	CHIP C	1000PF	K		
C576			CK73FB1H103K	CHIP C	0.010UF	K		
C577,578			CE04KW1H220M	ELECTRO	22UF	50WV		
C579,580			CC73FCH1H220J	CHIP C	22PF	J		
C581			CK73FB1H102K	CHIP C	1000PF	K		
C582			CK73FB1H103K	CHIP C	0.010UF	K		
C587,588			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C589,590			CC73FCH1H220J	CHIP C	22PF	J		
C593			CK73FB1H102K	CHIP C	1000PF	K		
C594			CK73FB1H103K	CHIP C	0.010UF	K		
C595-598			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C599,600			CC73FSL1H151J	CHIP C	150PF	J		
C601,602			CC73FSL1H101J	CHIP C	100PF	J		
C603,604			CE04KW1H220M	ELECTRO	22UF	50WV		
C605			CK73FB1H102K	CHIP C	1000PF	K		
C606			CK73FB1H103K	CHIP C	0.010UF	K		
C607,608			CE04KW1H220M	ELECTRO	22UF	50WV		
C609,610			CC73FCH1H220J	CHIP C	22PF	J		
C611			CK73FB1H102K	CHIP C	1000PF	K		
C612			CK73FB1H103K	CHIP C	0.010UF	K		
C619,620			CC73FCH1H220J	CHIP C	22PF	J		
C701-712			CC73FSL1H101J	CHIP C	100PF	J		
C713			CK73FB1H102K	CHIP C	1000PF	K		
C714			CK73FB1H103K	CHIP C	0.010UF	K		
C715			CK73FB1H102K	CHIP C	1000PF	K		
C716			CK73FB1H103K	CHIP C	0.010UF	K		
C717,718			CC73FSL1H470J	CHIP C	47PF	J		
C801-812			CC73FCH1H100D	CHIP C	10PF	D		
C813			CK73EB1H104K	CHIP C	0.10UF	K		
C814			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C815			CK73EB1H104K	CHIP C	0.10UF	K		
C816			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C817			CK73EB1H104K	CHIP C	0.10UF	K		
C818			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C901-903			CK73FB1H102K	CHIP C	1000PF	K	KP	
C904			CC73FSL1H221J	CHIP C	220PF	J	KP	
CN1 ,2		*	E40-9836-05	SOCKET FOR PIN ASSY				
CN51,52		*	E40-9836-05	SOCKET FOR PIN ASSY				

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia
⚠ indicates safety critical components.

KR-V999D/1090VR
PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

⑮

Ref. No	Address	New Parts	Parts No.	Description				Destination	Remarks
J1			E11-0200-05	MINIATURE PHONE JACK(5P)				KP	
J2			E11-0344-05	MINIATURE PHONE JACK				KP	
J3			E63-0174-05	PHONO JACK					
J71 ,72			E63-0139-15	PHONO JACK					
J73 -75			E11-0283-05	MINIATURE PHONE JACK(3P)				KP	
L1 -7			L92-0044-05	FERRITE CORE					
X1			L78-0294-05	RESONATOR (10.000M)					
X2		*	L77-2194-05	CRYSTAL RESONATOR(5.0M)					
X3		*	L77-2192-05	CRYSTAL RESONATOR(12.288M)					
R1 ,2			RK73FB2A103J	CHIP R	10K	J	1/10W		
R3 ,4			RK73FB2A512J	CHIP R	5.1K	J	1/10W		
R5 ,6			RK73FB2A912J	CHIP R	9.1K	J	1/10W		
R7 ,8			RK73FB2A103J	CHIP R	10K	J	1/10W		
R13 ,14			RK73FB2A512J	CHIP R	5.1K	J	1/10W		
R15 ,16			RK73FB2A104J	CHIP R	100K	J	1/10W		
R17 ,18			RK73FB2A473J	CHIP R	47K	J	1/10W		
R19 ,20			RK73FB2A104J	CHIP R	100K	J	1/10W		
R21 ,22			RK73FB2A103J	CHIP R	10K	J	1/10W		
R23			RK73FB2A512J	CHIP R	5.1K	J	1/10W		
R24			RK73FB2A822J	CHIP R	8.2K	J	1/10W		
R25			RK73FB2A912J	CHIP R	9.1K	J	1/10W		
R26			RK73FB2A182J	CHIP R	1.8K	J	1/10W		
R27 -29			RK73FB2A103J	CHIP R	10K	J	1/10W		
R30			RK73FB2A104J	CHIP R	100K	J	1/10W		
R31			RK73FB2A103J	CHIP R	10K	J	1/10W		
R32			RK73FB2A100J	CHIP R	10	J	1/10W		
R33			RK73FB2A512J	CHIP R	5.1K	J	1/10W		
R34			RK73FB2A182J	CHIP R	1.8K	J	1/10W		
R35 ,36			RK73FB2A104J	CHIP R	100K	J	1/10W		
R37 -40			RK73FB2A471J	CHIP R	470	J	1/10W		
R41 ,42			RK73FB2A103J	CHIP R	10K	J	1/10W		
R43 ,44			RK73FB2A512J	CHIP R	5.1K	J	1/10W		
R45 ,46			RK73FB2A912J	CHIP R	9.1K	J	1/10W		
R47 ,48			RK73FB2A103J	CHIP R	10K	J	1/10W		
R49 ,50			RK73FB2A471J	CHIP R	470	J	1/10W		
R51			RK73FB2A103J	CHIP R	10K	J	1/10W		
R52			RK73FB2A104J	CHIP R	100K	J	1/10W		
R53 ,54			RK73FB2A512J	CHIP R	5.1K	J	1/10W		
R55 ,56			RK73FB2A104J	CHIP R	100K	J	1/10W		
R57 -59			RK73FB2A203J	CHIP R	20K	J	1/10W		
R61 ,62			RK73FB2A104J	CHIP R	100K	J	1/10W		
R63 ,64			RK73FB2A133J	CHIP R	13K	J	1/10W		
R65 ,66			RK73FB2A622J	CHIP R	6.2K	J	1/10W		
R67 ,68			RK73FB2A104J	CHIP R	100K	J	1/10W		
R81 ,82			RK73FB2A104J	CHIP R	100K	J	1/10W		
R83 ,84			RK73FB2A133J	CHIP R	13K	J	1/10W		
R85 ,86			RK73FB2A622J	CHIP R	6.2K	J	1/10W		
R87 ,88			RK73FB2A104J	CHIP R	100K	J	1/10W		
R89 ,90			RK73FB2A203J	CHIP R	20K	J	1/10W		
R91			RK73FB2A104J	CHIP R	100K	J	1/10W		
R92			RK73FB2A622J	CHIP R	6.2K	J	1/10W		
R93			RK73FB2A133J	CHIP R	13K	J	1/10W		
R94 ,95			RK73FB2A104J	CHIP R	100K	J	1/10W		
R96 ,97			RK73FB2A203J	CHIP R	20K	J	1/10W		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

⑯

Ref. No	Address	New Parts	Parts No.	Description				Destination	Remarks
R98 ,99			RK73FB2A512J	CHIP R	5.1K	J	1/10W		
R111,112			RK73FB2A104J	CHIP R	100K	J	1/10W		
R113,114			RK73FB2A123J	CHIP R	12K	J	1/10W		
R115,116			RK73FB2A203J	CHIP R	20K	J	1/10W		
R117,118			RK73FB2A104J	CHIP R	100K	J	1/10W		
R119,120			RK73FB2A103J	CHIP R	10K	J	1/10W		
R121,122			RK73FB2A222J	CHIP R	2.2K	J	1/10W		
R123,124			RK73FB2A123J	CHIP R	12K	J	1/10W		
R125-128			RK73FB2A222J	CHIP R	2.2K	J	1/10W		
R129,130			RK73FB2A103J	CHIP R	10K	J	1/10W		
R131-135			RK73FB2A104J	CHIP R	100K	J	1/10W		
R136			RK73FB2A103J	CHIP R	10K	J	1/10W		
R137,138			RK73FB2A512J	CHIP R	5.1K	J	1/10W		
R151,152			RK73FB2A104J	CHIP R	100K	J	1/10W		
R153,154			RK73FB2A222J	CHIP R	2.2K	J	1/10W		
R155,156			RK73FB2A123J	CHIP R	12K	J	1/10W		
R157,158			RK73FB2A203J	CHIP R	20K	J	1/10W		
R159,160			RK73FB2A123J	CHIP R	12K	J	1/10W		
R161-164			RK73FB2A472J	CHIP R	4.7K	J	1/10W		
R165,166			RK73FB2A331J	CHIP R	330	J	1/10W		
R300			RK73FB2A101J	CHIP R	100	J	1/10W		
R301			RK73FB2A105J	CHIP R	1.0M	J	1/10W		
R303			RK73FB2A100J	CHIP R	10	J	1/10W		
R304-307			RK73FB2A101J	CHIP R	100	J	1/10W		
R308			RK73FB2A104J	CHIP R	100K	J	1/10W		
R309-313			RK73FB2A101J	CHIP R	100	J	1/10W		
R314-316			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R317-319			RK73FB2A101J	CHIP R	100	J	1/10W		
R320			RK73FB2A473J	CHIP R	47K	J	1/10W		
R321-323			RK73FB2A101J	CHIP R	100	J	1/10W		
R324			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R325-328			RK73FB2A101J	CHIP R	100	J	1/10W		
R329			RK73FB2A104J	CHIP R	100K	J	1/10W		
R330			RK73FB2A101J	CHIP R	100	J	1/10W		
R331			RK73FB2A104J	CHIP R	100K	J	1/10W		
R332			RK73FB2A105J	CHIP R	1.0M	J	1/10W		
R333			RK73FB2A104J	CHIP R	100K	J	1/10W		
R334,335			RK73FB2A101J	CHIP R	100	J	1/10W		
R336-345			RK73FB2A104J	CHIP R	100K	J	1/10W		
R346,347			RK73FB2A101J	CHIP R	100	J	1/10W		
R348			RK73FB2A104J	CHIP R	100K	J	1/10W		
R349,350			RK73FB2A101J	CHIP R	100	J	1/10W		
R351-376			RK73FB2A104J	CHIP R	100K	J	1/10W		
R377-379			RK73FB2A101J	CHIP R	100	J	1/10W		
R380-382			RK73FB2A104J	CHIP R	100K	J	1/10W		
R384,385			RK73FB2A750J	CHIP R	75	J	1/10W		
R387-398			RK73FB2A104J	CHIP R	100K	J	1/10W		
R399			RK73FB2A750J	CHIP R	75	J	1/10W		
R400-402			RD14NB2E471J	RD	470	J	1/4W	KP	
R403			RK73FB2A102J	CHIP R	1.0K	J	1/10W	KP	
R404			RD14NB2E470J	RD	47	J	1/4W	KP	
R405			RK73FB2A102J	CHIP R	1.0K	J	1/10W	KP	
R406-408			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R409			RK73FB2A101J	CHIP R	100	J	1/10W		
R410-413			RK73FB2A223J	CHIP R	22K	J	1/10W	KP	

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

⑰

Ref. No	Address	New Parts	Parts No.	Description				Destination	Remarks
R414			RK73FB2A102J	CHIP R	1.0K	J	1/10W	KP	
R501,502			RK73FB2A104J	CHIP R	100K	J	1/10W		
R503,504			RK73FB2A105J	CHIP R	1.0M	J	1/10W		
R505,506			RK73FB2A104J	CHIP R	100K	J	1/10W		
R507,508			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R509,510			RK73FB2A224J	CHIP R	220K	J	1/10W		
R511-514			RK73FB2A104J	CHIP R	100K	J	1/10W		
R515,516			RK73FB2A222J	CHIP R	2.2K	J	1/10W		
R517,518			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R519,520			RK73FB2A133J	CHIP R	13K	J	1/10W		
R521,522			RK73FB2A222J	CHIP R	2.2K	J	1/10W		
R523,524			RK73FB2A272J	CHIP R	2.7K	J	1/10W	KPYCM	
R523,524			RK73FB2A362J	CHIP R	3.6K	J	1/10W	TEQ	
R529,530			RK73FB2A244J	CHIP R	240K	J	1/10W		
R531,532			RK73FB2A100J	CHIP R	10	J	1/10W		
R533,534			RK73FB2A105J	CHIP R	1.0M	J	1/10W		
R535,536			RK73FB2A184J	CHIP R	180K	J	1/10W		
R537,538			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R539,540			RK73FB2A241J	CHIP R	240	J	1/10W		
R541-544			RK73FB2A104J	CHIP R	100K	J	1/10W		
R545,546			RK73FB2A222J	CHIP R	2.2K	J	1/10W		
R547,548			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R549,550			RK73FB2A334J	CHIP R	330K	J	1/10W		
R551,552			RK73FB2A822J	CHIP R	8.2K	J	1/10W		
R553,554			RK73FB2A133J	CHIP R	13K	J	1/10W		
R555,556			RK73FB2A272J	CHIP R	2.7K	J	1/10W	KPYCM	
R555,556			RK73FB2A362J	CHIP R	3.6K	J	1/10W	TEQ	
R557,558			RK73FB2A222J	CHIP R	2.2K	J	1/10W		
R559,560			RK73FB2A244J	CHIP R	240K	J	1/10W		
R563,564			RK73FB2A105J	CHIP R	1.0M	J	1/10W		
R565,566			RK73FB2A184J	CHIP R	180K	J	1/10W		
R567,568			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R569,570			RK73FB2A241J	CHIP R	240	J	1/10W		
R571-574			RK73FB2A104J	CHIP R	100K	J	1/10W		
R575,576			RK73FB2A222J	CHIP R	2.2K	J	1/10W		
R577,578			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R583,584			RK73FB2A133J	CHIP R	13K	J	1/10W		
R585,586			RK73FB2A272J	CHIP R	2.7K	J	1/10W	KPYCM	
R585,586			RK73FB2A362J	CHIP R	3.6K	J	1/10W	TEQ	
R587,588			RK73FB2A222J	CHIP R	2.2K	J	1/10W		
R589,590			RK73FB2A244J	CHIP R	240K	J	1/10W		
R593,594			RK73FB2A105J	CHIP R	1.0M	J	1/10W		
R595,596			RK73FB2A184J	CHIP R	180K	J	1/10W		
R597,598			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R599,600			RK73FB2A241J	CHIP R	240	J	1/10W		
R601-604			RK73FB2A104J	CHIP R	100K	J	1/10W		
R605,606			RK73FB2A222J	CHIP R	2.2K	J	1/10W		
R607,608			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R613,614			RK73FB2A133J	CHIP R	13K	J	1/10W		
R615,616			RK73FB2A272J	CHIP R	2.7K	J	1/10W	KPYCM	
R615,616			RK73FB2A362J	CHIP R	3.6K	J	1/10W	TEQ	
R617,618			RK73FB2A222J	CHIP R	2.2K	J	1/10W		
R619,620			RK73FB2A244J	CHIP R	240K	J	1/10W		
R701,702			RK73FB2A221J	CHIP R	220	J	1/10W		
R703,704			RK73FB2A224J	CHIP R	220K	J	1/10W		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

⑱

Ref. No	Address	New Parts	Parts No.	Description				Destination	Remarks
R705,706			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R707,708			RK73FB2A224J	CHIP R	220K	J	1/10W		
R709,710			RK73FB2A221J	CHIP R	220	J	1/10W		
R711,712			RK73FB2A104J	CHIP R	100K	J	1/10W		
R713,714			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R715,716			RK73FB2A104J	CHIP R	100K	J	1/10W		
R717,718			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R719,720			RK73FB2A104J	CHIP R	100K	J	1/10W		
R721,722			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R723,724			RK73FB2A104J	CHIP R	100K	J	1/10W		
R725-728			RK73FB2A103J	CHIP R	10K	J	1/10W		
R801-814			RK73FB2A473J	CHIP R	47K	J	1/10W		
R815			RK73FB2A562J	CHIP R	5.6K	J	1/10W		
R816,817			RK73FB2A473J	CHIP R	47K	J	1/10W		
R818			RK73FB2A562J	CHIP R	5.6K	J	1/10W		
R819,820			RK73FB2A473J	CHIP R	47K	J	1/10W		
R821			RK73FB2A562J	CHIP R	5.6K	J	1/10W		
R902			RK73FB2A913J	CHIP R	91K	J	1/10W	KP	
R903			RK73FB2A223J	CHIP R	22K	J	1/10W	KP	
R904-906			RD14NB2E471J	RD	470	J	1/4W	KP	
D1 ,2			DA204K	DIODE					
D3 -5			MA110	DIODE					
D6			DA204K	DIODE					
D41			DA204K	DIODE					
D501			DA204K	DIODE					
D502-504			MA110	DIODE					
D701			DA204K	DIODE					
D702,703			MA110	DIODE					
D704			MA110	DIODE				KP	
D801-803		*	UDZ18B	ZENER DIODE					
IC1 -16			NJM4580E	ANALOGUE IC					
IC1 -16			NJM4580ED	ANALOGUE IC					
IC17			TC9163AF	MOS-IC					
IC18			TC9162AF	MOS-IC					
IC19,20			TC7W00FU	MOS-IC					
IC31			TA7805S	IC(VOLTAGE REGULATOR/ +5V)					
IC31			UPC7805AHF	ANALOGUE IC					
IC32		*	UPD78016FGC522	MI-COM IC					
IC33		*	DSPF56009FJ81	MOS-IC					
IC34		*	CS4226-KQ	MOS-IC					
IC35			TC74HCU04AF	IC(HEX INVERTER SMD)					
IC36		*	LH64256CK-70	MEMORY IC					
IC37,38			TA7805S	IC(VOLTAGE REGULATOR/ +5V)					
IC37,38			UPC7805AHF	ANALOGUE IC					
IC39			TC74HCU04AF	IC(HEX INVERTER SMD)					
IC51		*	TC9412AP	MOS-IC					
IC52,53			NJM4580E	ANALOGUE IC					
IC52,53			NJM4580ED	ANALOGUE IC					
IC54		*	TC9412AP	MOS-IC					
IC55,56			NJM4580E	ANALOGUE IC					
IC55,56			NJM4580ED	ANALOGUE IC					
IC57		*	TC9412AP	MOS-IC					
IC58,59			NJM4580E	ANALOGUE IC					
IC58,59			NJM4580ED	ANALOGUE IC					
IC60		*	TC9412AP	MOS-IC					

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

KR-V999D/1090VR
PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

⑲

Ref. No	Address	New Parts	Parts No.	Description		Destination	Remarks
IC61,62			NJM4580E	ANALOGUE IC			
IC61,62			NJM4580ED	ANALOGUE IC			
IC71,72			TC9163AF	MOS-IC			
Q1 -3			DTC124EUA	DIGITAL TRANSISTOR		KP	
Q1 -3			UN5212	DIGITAL TRANSISTOR		KP	
Q4 ,5			DTA124EUA	DIGITAL TRANSISTOR		KP	
Q4 ,5			UN5112	DIGITAL TRANSISTOR		KP	
Q501-516			2SC4213(B)	TRANSISTOR			
Q517			DTC124EUA	DIGITAL TRANSISTOR		KP	
Q517			UN5212	DIGITAL TRANSISTOR		KP	
Q518			2SB1308(Q,R)	TRANSISTOR		KP	
Q801-803			DTC113ZUA	DIGITAL TRANSISTOR			
Q801-803			UN5219	DIGITAL TRANSISTOR			
A1			W02-1181-05	OPTIC RECEIVING MODULE			
SUB CIRCUIT UNIT (X13-747X-XX)							
C203,204		*	CK45FB1H222KMM	CERAMIC	2200PF K		
C205,206			CE04KW1E470M	ELECTRO	47UF 25WV		
C207,208			CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C209			CE04KW1V100M	ELECTRO	10UF 35WV		
C221			CE04KW1V100M	ELECTRO	10UF 35WV		
C223			CE04KW1A101M	ELECTRO	100UF 10WV		
C224			CF92FV1H104J	MF-C	0.10UF J		
C225			CE04KW1V100M	ELECTRO	10UF 35WV		
C226			CE04KW1E470M	ELECTRO	47UF 25WV		
C227			CE04KW1A101M	ELECTRO	100UF 10WV		
C228			CF92FV1H104J	MF-C	0.10UF J		
C229			CE04KW1E470M	ELECTRO	47UF 25WV		
C231,232			CE04KW1H100M	ELECTRO	10UF 50WV		
C233,234			CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C235,236			CE04KW1H100M	ELECTRO	10UF 50WV		
C237,238			CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C239			CE04KW1H100M	ELECTRO	10UF 50WV		
C240,241			CF92FV1H104J	MF-C	0.10UF J		
C242,243			CE04KW1H100M	ELECTRO	10UF 50WV		
C251,252			CE04KW1E470M	ELECTRO	47UF 25WV		
C253			CF92FV1H104J	MF-C	0.10UF J		
C254,255			CE04KW1E470M	ELECTRO	47UF 25WV		
C256			CF92FV1H333J	MF-C	0.033UF J	KP	
C301			CE04KW1H010M	ELECTRO	1.0UF 50WV		
C302			CE04KW0J221M	ELECTRO	220UF 6.3WV		
C303			C90-1826-05	BACKUP-C	0.047F 5.5WV		
C304			CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C305			CE04KW1H010M	ELECTRO	1.0UF 50WV		
C307,308		*	CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C321		*	CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C322,323		*	CK45FB1H102KMM	CERAMIC	1000PF K		
C324		*	CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C351,352		*	CC45FSL1H221JN	CERAMIC	220PF J		
C353		*	CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C401-405			CE04KW1V102M	ELECTRO	1000UF 35WV		
C406			CE04KW1J471M	ELECTRO	470UF 63WV		
C407			CE04KW1V471M	ELECTRO	470UF 35WV		
C408			CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C409,410			CE04KW1C222M	ELECTRO	2200UF 16WV		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

⑳

Ref. No	Address	New Parts	Parts No.	Description			Destination	Remarks
C412,413		*	CK45FF1H103ZMM	CERAMIC	0.010UF	Z		
C415-417			CK45FE2H103PMM	CERAMIC	0.010UF	P		
C420			CK45FE2H103PMM	CERAMIC	0.010UF	P		
⚠ C421			C91-1488-05	MF	6800PF	250VAC	MCTEQ	
C431			CK45FB1H471KMM	CERAMIC	470PF	K		
C432			CE04KW1H100M	ELECTRO	10UF	50WV		
CN101,102			E40-9853-05	PIN ASSY				
CN103			E40-9849-05	PIN ASSY				
CN104			E40-9847-05	PIN ASSY				
CN105,106			E40-9853-05	PIN ASSY				
CN107			E40-9849-05	PIN ASSY				
CN108			E40-9848-05	PIN ASSY				
CN109			E40-9847-05	PIN ASSY				
CN110		*	E40-9846-05	PIN ASSY				
CN111			E40-4804-05	SOCKET FOR PIN ASSY				
CN401			E40-4808-05	PIN ASSY				
CN402			E40-4294-05	FLAT CABLE CONNECTOR				
CN403			E40-4295-05	FLAT CABLE CONNECTOR				
J301			E11-0293-05	MINIATURE PHONE JACK(2P φ)				
⚠ F11 -13			F05-1222-05	FUSE (SEMKO)	(250V T1.25A L)		MYCTEQ	
⚠ F11 -13			F50-0067-05	FUSE(5X20)			KP	
⚠ F14			F05-5016-05	FUSE (SEMKO)	(250V T500MA)		MYCTEQ	
⚠ F14			F50-0066-05	FUSE(5X20)			KP	
⚠ F15 ,16			F05-1623-05	FUSE (SEMKO)	(250V T1.6AL)		MYCTEQ	
⚠ F15 ,16		*	F50-0068-05	FUSE(5X20)			KP	
⚠ F17			F05-1222-05	FUSE (SEMKO)	(250V T1.25A L)		MYCTEQ	
⚠ F17			F50-0067-05	FUSE(5X20)			KP	
CN411-424			J13-0075-05	FUSE CLIP				
L101			L40-1021-14	SMALL FIXED INDUCTOR(1.0MH,K)			KP	
L108			L92-0044-05	FERRITE CORE				
X1			L78-0267-05	RESONATOR	(4.194MHZ)			
CP1 ,2			R90-0803-05	MULTI-COMP	100KX7	J 1/4W		
CP3			R90-0500-05	MULTI-COMP	100KX6	J 1/4W		
CP4			R90-0855-05	MULTI-COMP	100KX5	J		
CP5			R90-0851-05	MULTI-COMP	100KX11			
CP6			R90-0482-05	MULTI-COMP	100KX4	J 1/6W		
⚠ R207		*	RD14NB2E1R8J	RD	1.8	J 1/4W		
⚠ R208			RD14NB2E2R7J	RD	2.7	J 1/4W		
R211,212			RD14NB2E102J	RD	1.0K	J 1/4W		
R215,216			RD14NB2E221J	RD	220	J 1/4W		
R231			RD14NB2E471J	RD	470	J 1/4W		
R232			RD14NB2E681J	RD	680	J 1/4W		
⚠ R233,234			RD14NB2E2R2J	RD	2.2	J 1/4W		
R401			RD14NB2E4R7J	RD	4.7	J 1/4W	KP	
⚠ R402		*	RS14KB3A472JFR	FL-PROOF RS	4.7K	J 1W		
R411,412			RD14NB2E102J	RD	1.0K	J 1/4W		
R413			RD14NB2E6R8J	RD	6.8	J 1/4W		
⚠ R414			RD14NB2E100J	RD	10	J 1/4W		
R415			RD14NB2E681J	RD	680	J 1/4W		
⚠ S1			S40-1138-05	PUSH SWITCH (POWER TYPE)			MCTEQ	
D201,202			HZS15S(B)	ZENER DIODE				

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
D201,202			RD15JS(B)	ZENER DIODE		
D203			HZS5.1S(B2)	ZENER DIODE		
D203			RD5.1JS(B2)	ZENER DIODE		
D204			HSS104A	DIODE		
D294			1SS131	DIODE		
D205			HZS8.2S(B2)	ZENER DIODE		
D205			RD8.2JS(B2)	ZENER DIODE		
D206			HZS7.5S(B)	ZENER DIODE		
D206			RD7.5JS(B)	ZENER DIODE		
D207			HZS11N(B)	ZENER DIODE		
D207			RD11ES(B)	ZENER DIODE		
D211,212			HZS15S(B)	ZENER DIODE		
D211,212			RD15JS(B)	ZENER DIODE		
D302-306			HSS104A	DIODE		
D302-306			1SS131	DIODE		
D313-317			HSS104	DIODE		
D313-317			1SS133	DIODE		
D327-331			HSS104	DIODE		
D327-331			1SS133	DIODE		
D333,334			HSS104	DIODE	KP	
D333,334			1SS133	DIODE	KP	
D351-354			HSS104	DIODE		
D351-354			1SS133	DIODE		
⚠ D401-404			1B4B41	DIODE		
D405			S5688B	DIODE		
D405			1SR139-400	DIODE		
D406,407			HZS7.5S(B)	ZENER DIODE		
D406,407			RD7.5JS(B)	ZENER DIODE		
D411,412			HSS104	DIODE		
D411,412			1SS133	DIODE		
D413			HZS4.7N(B)	ZENER DIODE		
D413			RD4.7ES(B)	ZENER DIODE		
IC1		*	UPD78058GC-902	MI-COM IC		
IC2			S-806D-Z	ANALOGUE IC		
IC3			NJM4580D-D	IC(OP AMP X2)		
⚠ IC5			TA7805S	IC(VOLTAGE REGULATOR/ +5V)		
⚠ IC5			UPC7805AHF	ANALOGUE IC		
⚠ IC6			TA79005S	IC(VOLTAGE REGULATOR/ -5V)		
IC7			NJU3713D	MOS-IC		
⚠ IC8			TA7805S	IC(VOLTAGE REGULATOR/ +5V)		
IC8			UPC7805AHF	ANALOGUE IC		
⚠ Q201			2SD2061	TRANSISTOR		
⚠ Q202			2SB1370	TRANSISTOR		
Q203			2SC2458(Y,GR)	TRANSISTOR		
Q203			2SC3311A(Q,R)	TRANSISTOR		
Q204			2SA1048(Y,GR)	TRANSISTOR		
Q204			2SA1309A(Q,R)	TRANSISTOR		
⚠ Q205			2SD2061	TRANSISTOR		
⚠ Q206,207			2SC2458(Y,GR)	TRANSISTOR		
⚠ Q206,207			2SC3311A(Q,R)	TRANSISTOR		
Q208			2SC2458(Y,GR)	TRANSISTOR	KP	
Q208			2SC3311A(Q,R)	TRANSISTOR	KP	
Q209			2SK246(Y,GR)	FET		
Q210			DTA113ZSA	DIGITAL TRANSISTOR		
Q210			UN4119	DIGITAL TRANSISTOR		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No	Address	New Parts	Parts No.	Description		Destination	Remarks
⚠ Q211			2SD2061	TRANSISTOR			
⚠ Q212			2SB1370	TRANSISTOR			
Q213			DTC113ZSA	DIGITAL TRANSISTOR		KP	
Q213			UN4219	DIGITAL TRANSISTOR		KP	
Q214			DTC113ZSA	DIGITAL TRANSISTOR			
Q214			UN4219	DIGITAL TRANSISTOR			
Q301			2SC2458(Y,GR)	TRANSISTOR			
Q301			2SC3311A(Q,R)	TRANSISTOR			
DISPLAY UNIT (X14-430X-XX)							
D104-106		*	B30-2509-05	LED(RED)			
C1 ,2			C91-0745-05	CERAMIC	100PF K		
C3 ,4			C91-0753-05	CHIP C	470PF K		
C5 ,6			C90-3224-05	ELECTRO	4.7UF 16WV		
C7 ,8			C91-0729-05	CERAMIC	22PF J		
C9 ,10			C90-3224-05	ELECTRO	4.7UF 16WV		
C11 ,12			CE04KW2A4R7M	ELECTRO	4.7UF 100WV		
C13 ,14		*	CC45FSL1H221JN	CERAMIC	220PF J		
C15 ,16		*	CC45FSL1H220JN	CERAMIC	22PF J		
C17 ,18		*	CK45FB1H561KMM	CERAMIC	560PF K		
C19 ,20			CQ93FMG1H563J	MYLAR	0.056UF J		
C21 ,22			CE04KW1C100M	ELECTRO	10UF 16WV		
C23 ,24			CQ93FMG1H393J	MYLAR	0.039UF J		
C25 ,26			CE04KW2A4R7M	ELECTRO	4.7UF 100WV		
C27 ,28		*	CK45FB1H471KMM	CERAMIC	470PF K		
C33 ,34			CQ93FMG1H103J	MYLAR	0.010UF J		
C47 ,48			CQ93FMG1H103J	MYLAR	0.010UF J		
C55			C91-0769-05	CERAMIC	0.010UF K		
C56			C91-0745-05	CERAMIC	100PF K		
C57			C91-0769-05	CERAMIC	0.010UF K		
C58 ,59			C91-0745-05	CERAMIC	100PF K		
C101-103		*	CC45FSL1H101JN	CERAMIC	100PF J		
C104-107			C91-0753-05	CHIP C	470PF K		
C108-112			CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C113			CE04KW1V330M	ELECTRO	33UF 35WV		
C114		*	CC45FCH1H470JN	CERAMIC	47PF J		KPYTEQ
C115		*	CC45FCH1H220JN	CERAMIC	22PF J		KPYTEQ
C116		*	CK45FF1H103ZMM	CERAMIC	0.010UF Z		KPYTEQ
C117		*	CK45FB1H561KMM	CERAMIC	560PF K		KPYTEQ
C118		*	CC45FSL1H331JN	CERAMIC	330PF J		KPYTEQ
C119			CE04KW1H2R2M	ELECTRO	2.2UF 50WV		KPYTEQ
C120			CE04KW1C100M	ELECTRO	10UF 16WV		KPYTEQ
C121			CE04KW1C100M	ELECTRO	10UF 16WV		
C151			CE04KW1H220M	ELECTRO	22UF 50WV		
C152			CE04KW1H100M	ELECTRO	10UF 50WV		
C153,154			CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C155,156			CE04KW1V4R7M	ELECTRO	4.7UF 35WV		
C201-214		*	CC45FSL1H101JN	CERAMIC	100PF J		
C215			CE04KW1H4R7M	ELECTRO	4.7UF 50WV		
C216			CE04KW1V4R7M	ELECTRO	4.7UF 35WV		
C217			CQ93FMG1H223J	MYLAR	0.022UF J		
C218			CE04KW1C331M	ELECTRO	330UF 16WV		
C219			CE04KW1H4R7M	ELECTRO	4.7UF 50WV		
C220			CE04KW1V4R7M	ELECTRO	4.7UF 35WV		
C221			CQ93FMG1H223J	MYLAR	0.022UF J		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No	Address	New Parts	Parts No.	Description		Destination	Remarks
C222			CE04KW1C331M	ELECTRO	330UF 16WV		
C223			CE04KW1H4R7M	ELECTRO	4.7UF 50WV		
C224			CE04KW1V4R7M	ELECTRO	4.7UF 35WV		
C225			CE04KW1H4R7M	ELECTRO	4.7UF 50WV		
C226			CE04KW1V4R7M	ELECTRO	4.7UF 35WV		
C227			CQ93FMG1H223J	MYLAR	0.022UF J		
C228			CE04KW1V4R7M	ELECTRO	4.7UF 35WV		
C229,230			CE04HW1E100M	NP-ELEC	10UF 25WV		
C231-234		*	CC45FSL1H220JN	CERAMIC	22PF J		
C235,236			CE04HW1E100M	NP-ELEC	10UF 25WV		
C251			CE04KW1H100M	ELECTRO	10UF 50WV		
C252		*	CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C253			CE04KW1H100M	ELECTRO	10UF 50WV		
C254-258		*	CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C259		*	CK45FB1H102KMM	CERAMIC	1000PF K		
C260		*	CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C261			CE04KW1H100M	ELECTRO	10UF 50WV		
C262		*	CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C263			CE04KW1H100M	ELECTRO	10UF 50WV		
C264		*	CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C265			CE04KW1H100M	ELECTRO	10UF 50WV		
C266		*	CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C267			CE04KW1H100M	ELECTRO	10UF 50WV		
C268		*	CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C301,302			CE04KW2A4R7M	ELECTRO	4.7UF 100WV		
C303,304		*	CC45FSL1H271JN	CERAMIC	270PF J		
C305-308		*	CC45FSL1H101JN	CERAMIC	100PF J		
C311,312			CQ93FMG1H222J	MYLAR	2200PF J		
C313,314		*	CC45FSL1H820JN	CERAMIC	82PF J		
C315,316		*	CC45FSL1H121JN	CERAMIC	120PF J		
C317,318			CE04KW1H470M	ELECTRO	47UF 50WV		
C319,320		*	CC45FSL1H220JN	CERAMIC	22PF J		
C323,324			CQ93FMG1H103J	MYLAR	0.010UF J		
C325,326		*	CC45FSL1H151JN	CERAMIC	150PF J		
C337,338			CE04KW1E101M	ELECTRO	100UF 25WV		
C339,340		*	CC45FSL1H820JN	CERAMIC	82PF J		
C341,342		*	CC45FSL1H121JN	CERAMIC	120PF J		
C343,344			CQ93FMG1H103J	MYLAR	0.010UF J		
C351,352			CE04KW2A4R7M	ELECTRO	4.7UF 100WV		
C353,354		*	CC45FSL1H271JN	CERAMIC	270PF J		
C355-358		*	CC45FSL1H101JN	CERAMIC	100PF J		
C361,362			CQ93FMG1H222J	MYLAR	2200PF J		
C363,364		*	CC45FSL1H820JN	CERAMIC	82PF J		
C365,366		*	CC45FSL1H121JN	CERAMIC	120PF J		
C367,368			CE04KW1H470M	ELECTRO	47UF 50WV		
C369,370		*	CC45FSL1H220JN	CERAMIC	22PF J		
C373,374			CQ93FMG1H103J	MYLAR	0.010UF J		
C375,376		*	CC45FSL1H151JN	CERAMIC	150PF J		
C387,388			CE04KW1E101M	ELECTRO	100UF 25WV		
C389,390		*	CC45FSL1H820JN	CERAMIC	82PF J		
C391,392		*	CC45FSL1H121JN	CERAMIC	120PF J		
C393,394			CQ93FMG1H103J	MYLAR	0.010UF J		
C395		*	CC45FSL1H101JN	CERAMIC	100PF J		
C396		*	CC45FSL1H100DN	CERAMIC	10PF D		
C401			CE04KW2A4R7M	ELECTRO	4.7UF 100WV		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No	Address	New Parts	Parts No.	Description		Destination	Remarks
C402		*	CC45FSL1H271JN	CERAMIC	270PF J		
C403,404		*	CC45FSL1H101JN	CERAMIC	100PF J		
C406			CQ93FMG1H222J	MYLAR	2200PF J		
C407		*	CC45FSL1H820JN	CERAMIC	82PF J		
C408		*	CC45FSL1H121JN	CERAMIC	120PF J		
C409			CE04KW1H470M	ELECTRO	47UF 50WV		
C410		*	CC45FSL1H220JN	CERAMIC	22PF J		
C412			CQ93FMG1H103J	MYLAR	0.010UF J		
C413			CC45FSL1H151JN	CERAMIC	150PF J		
C419			CE04KW1E101M	ELECTRO	100UF 25WV		
C420		*	CC45FSL1H820JN	CERAMIC	82PF J		
C421		*	CC45FSL1H121JN	CERAMIC	120PF J		
C422			CQ93FMG1H103J	MYLAR	0.010UF J		
C445			CQ93FMG1H103J	MYLAR	0.010UF J		
C446			CQ93FMG1H102J	MYLAR	1000PF J		
C447-450		*	CC45FSL1H101JN	CERAMIC	100PF J		
C451,452		*	CK45FB1H391KMM	CERAMIC	390PF K		
C453,454			CE04KW1H3R3M	ELECTRO	3.3UF 50WV		
C455,456			CQ93FMG1H102J	MYLAR	1000PF J		
C457			CE04KW2A4R7M	ELECTRO	4.7UF 100WV		
C458		*	CC45FSL1H151JN	CERAMIC	150PF J		
C459		*	CK45FF1H103ZMM	CERAMIC	0.010UF Z		
C460			CE04KW1H220M	ELECTRO	22UF 50WV		
C461,462		*	CK45FB1H102KMM	CERAMIC	1000PF K		
C472			CE04KW1E101M	ELECTRO	100UF 25WV		
C473-476			CE04KW2A4R7M	ELECTRO	4.7UF 100WV		
CN101			E40-4796-05	PIN ASSY			
CN201		*	E40-9829-05	SOCKET FOR PIN ASSY			
CN202			E40-9830-05	SOCKET FOR PIN ASSY			
CN301			E40-4609-05	PIN ASSY			
CN302			E40-4293-05	FLAT CABLE CONNECTOR			
CN303,304			E40-4808-05	PIN ASSY			
CN305			E40-4293-05	FLAT CABLE CONNECTOR			
J1			E63-0129-05	PHONO JACK			
J2			E56-0012-05	CYLINDRICAL RECEPTACLE			
J3			E11-0271-05	PHONE JACK (METAL SLEEVE)			MCTEQ
J3			E11-0272-05	PHONE JACK			KPY
J201			E56-0014-05	CYLINDRICAL RECEPTACLE			
J202,203			E56-0011-05	CYLINDRICAL RECEPTACLE			
J301			E63-0095-05	PHONO JACK			
J302		*	E63-1005-05	PHONO JACK			
CN111			J19-5626-03	HOLDER			
E5 ,6			J11-0808-05	WIRE CLAMPER			
L1 -4			L92-0044-05	FERRITE CORE			
L6 -8			L92-0044-05	FERRITE CORE			
L101			L40-1091-17	SMALL FIXED INDUCTOR(1UH)			KPYTEQ
L102			L40-1001-17	SMALL FIXED INDUCTOR(10UH,K)			KPYTEQ
X101		*	L77-2200-05	CRYSTAL RESONATOR(4.332MHZ)			KPYTEQ
R27 ,28		*	RS14KB3D471JFR	FL-PROOF RS	470 J 2W		
⚠ R152			RD14NB2E103J	RD	10K J 1/4W		
R153,154			RD14NB2E221J	RD	220 J 1/4W		
R319-322			RD14NB2E271J	RD	270 J 1/4W		
R323,324			RD14NB2E181J	RD	180 J 1/4W		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

㉕

Ref. No	Address	New Parts	Parts No.	Description			Destination	Remarks
R369-372			RD14NB2E271J	RD	270	J 1/4W		
R373,374			RD14NB2E181J	RD	180	J 1/4W		
R410,411			RD14NB2E271J	RD	270	J 1/4W		
R412			RD14NB2E181J	RD	180	J 1/4W		
⚠ R465,466			RD14NB2E471J	RD	470	J 1/4W		
R478			RD14NB2E332J	RD	3.3K	J 1/4W		
R479			RD14NB2E472J	RD	4.7K	J 1/4W		
R480			RD14NB2E391J	RD	390	J 1/4W		
VR1 ,2			R31-0063-05	VARIABLE RESISTOR				
K301,302			S76-0028-05	MAGNETIC RELAY				
S1 -10			S70-0031-05	TACT SWITCH				
S11			S70-0031-05	TACT SWITCH			KPYTEQ	
S12 -19			S70-0031-05	TACT SWITCH				
S20			S70-0031-05	TACT SWITCH			KPYTEQ	
S21 -28			S70-0031-05	TACT SWITCH				
S29			S70-0031-05	TACT SWITCH			KPYTEQ	
S30 -33			S70-0031-05	TACT SWITCH				
S201			S62-0034-05	SLIDE SWITCH				
S34			T99-0559-05	ROTARY ENCODER				
S35			T99-0571-05	ROTARY ENCODER				
D1 -4			HSS104	DIODE				
D1 -4			1SS133	DIODE				
D101			HSS104A	DIODE				
D101			1SS131	DIODE				
D102			HSS104	DIODE			KPYTEQ	
D102			1SS133	DIODE			KPYTEQ	
D103			HSS104A	DIODE				
D103			1SS131	DIODE				
D107,108			HSS104	DIODE				
D107,108			1SS133	DIODE				
D109			HSS104	DIODE			KPYTEQ	
D109			1SS133	DIODE			KPYTEQ	
D110-115			HSS104	DIODE				
D110-115			1SS133	DIODE				
D151,152			HZS3.3N(B2)	ZENER DIODE				
D151,152			RD3.3ES(B2)	ZENER DIODE				
D153			HZS11N(B2)	ZENER DIODE				
D153			RD11ES(B2)	ZENER DIODE				
D201,202			HSS104	DIODE				
D201,202			1SS133	DIODE				
D205,206			HSS104	DIODE				
D205,206			1SS133	DIODE				
D301-304			HSS104	DIODE				
D301-304			1SS133	DIODE				
D351-354			HSS104	DIODE				
D351-354			1SS133	DIODE				
D401,402			HSS104	DIODE				
D401,402			1SS133	DIODE				
D451,452			HZS24N(B)	ZENER DIODE				
D451,452			RD24ES(B)	ZENER DIODE				
D453-457			HSS104	DIODE				
D453-457			1SS133	DIODE				
D458			HZS5.1S(B2)	ZENER DIODE				
D458			RD5.1JS(B2)	ZENER DIODE				

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis
Teile ohne **Parts No.** werden nicht geliefert.

㉖

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
D471,472			HSS104A	DIODE		
D471,472			1SS131	DIODE		
D473			HZS18N(B2)	ZENER DIODE		
D473			RD18ES(B2)	ZENER DIODE		
D474			HZS16N(B2)	ZENER DIODE	KPYCM	
D474			HZS8.2N(B2)	ZENER DIODE	TEQ	
D474			RD16ES(B2)	ZENER DIODE	KPYCM	
D474			RD8.2ES(B2)	ZENER DIODE	TEQ	
D475			HSS104	DIODE		
D475			1SS133	DIODE		
D476			HSS104A	DIODE	KPYCM	
D476			1SS131	DIODE	KPYCM	
D477,478			HSS104A	DIODE		
D477,478			1SS131	DIODE		
D479			HZS11N(B2)	ZENER DIODE		
D479			RD11ES(B2)	ZENER DIODE		
ED1		*	11-MT-110GK	INDICATOR TUBE		
IC1			NJM4565L-D	ANALOGUE IC		
IC2			NJM4565D-D	IC(OP AMP X2)		
IC101			UPD16311	MOS-IC		
IC102			SAA6579	ANALOGUE IC	KPYTEQ	
IC201,202		*	SN761200N	ANALOGUE IC		
IC203,204			TC74HC4053AP	IC(ANALOG MULTIPLEXER)		
IC205,206			MC14577CP	ANALOGUE IC		
IC301			NJM4565D-D	IC(OP AMP X2)		
Q1 ,2			2SC2458(Y,GR)	TRANSISTOR		
Q1 ,2			2SC3311A(Q,R)	TRANSISTOR		
Q101,102			2SC2458(Y,GR)	TRANSISTOR		
Q101,102			2SC3311A(Q,R)	TRANSISTOR		
⚠ Q151			2SA1534A(R,S)	TRANSISTOR		
Q152			2SA1048(Y,GR)	TRANSISTOR		
Q152			2SA1309A(Q,R)	TRANSISTOR		
Q201,202			2SC2878(B)	TRANSISTOR		
Q204			DTA113ZSA	DIGITAL TRANSISTOR		
Q204			UN4119	DIGITAL TRANSISTOR		
Q205			DTC113ZSA	DIGITAL TRANSISTOR		
Q205			UN4219	DIGITAL TRANSISTOR		
Q206			DTA113ZSA	DIGITAL TRANSISTOR		
Q206			UN4119	DIGITAL TRANSISTOR		
Q207-210			2SC2003(L,K)	TRANSISTOR		
Q301-304			2SA992(F,E)	TRANSISTOR		
Q305-308			2SC2631(R,S)	TRANSISTOR		
Q309,310			2SA1123(R,S)	TRANSISTOR		
Q311,312			2SA1048(Y,GR)	TRANSISTOR		
Q311,312			2SA1309A(Q,R)	TRANSISTOR		
Q351-354			2SA992(F,E)	TRANSISTOR		
Q355-358			2SC2631(R,S)	TRANSISTOR		
Q359,360			2SA1123(R,S)	TRANSISTOR		
Q361,362			2SA1048(Y,GR)	TRANSISTOR		
Q361,362			2SA1309A(Q,R)	TRANSISTOR		
Q401,402			2SA992(F,E)	TRANSISTOR		
Q403,404			2SC2631(R,S)	TRANSISTOR		
Q405			2SA1123(R,S)	TRANSISTOR		
Q406			2SA1048(Y,GR)	TRANSISTOR		
Q406			2SA1309A(Q,R)	TRANSISTOR		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

㉗

Ref. No	Address	New Parts	Parts No.	Description			Destination	Remarks
Q451,452			DTC113ZSA	DIGITAL TRANSISTOR				
Q451,452			UN4219	DIGITAL TRANSISTOR				
Q471			2SA1048(Y,GR)	TRANSISTOR				
Q471			2SA1309A(Q,R)	TRANSISTOR				
Q472			DTC124ESA	DIGITAL TRANSISTOR				
Q472			UN4212	DIGITAL TRANSISTOR				
⚠ Q475			2SC1845(F,E)	TRANSISTOR				
⚠ Q476			2SA1535(R,S)	TRANSISTOR				
A1			W02-2561-05	ELECTRIC CIRCUIT MODULE				
SWITCH UNIT (X25-588X-XX)								
C1 ,2		*	CC45FSL1H151JN	CERAMIC	150PF	J		
C3 ,4			CE04KW1H100M	ELECTRO	10UF	50WV		
C5 ,6			CQ93FMG1H393J	MYLAR	0.039UF	J		
C7 ,8			CQ93FMG1H113J	MYLAR	0.011UF	J		
C9 ,10			CE04EW0J102M	ELECTRO	1000UF	6.3WV		
C11 ,12			CQ93FMG1H182J	MYLAR	1800PF	J		
C13 -16			CQ93FMG1H102J	MYLAR	1000PF	J		
C17 ,18			CE04KW1E470M	ELECTRO	47UF	25WV		
C19 ,20		*	CK45FB1H471KMM	CERAMIC	470PF	K		
C21			CF92FV1H104J	MF-C	0.10UF	J		
C22			CQ93FMG1H102J	MYLAR	1000PF	J		
C31 -40			CC45FSL1H151JN	CERAMIC	150PF	J		
C51 ,52			CE04KW1H100M	ELECTRO	10UF	50WV		
C53 ,54		*	CC45FSL1H470JN	CERAMIC	47PF	J		
C55 ,56			CE04KW1E470M	ELECTRO	47UF	25WV		
C57			CQ93FMG1H103J	MYLAR	0.010UF	J		
C58			CQ93FMG1H102J	MYLAR	1000PF	J		
C71 ,72			CE04KW1H2R2M	ELECTRO	2.2UF	50WV		
C75 ,76		*	CC45FSL1H470JN	CERAMIC	47PF	J		
C77			CQ93FMG1H103J	MYLAR	0.010UF	J		
C78			CQ93FMG1H102J	MYLAR	1000PF	J		
C101,102			CE04KW1H2R2M	ELECTRO	2.2UF	50WV		
C103,104		*	CC45FSL1H470JN	CERAMIC	47PF	J		
C105,106			CE04KW1H2R2M	ELECTRO	2.2UF	50WV		
C107,108			CC45FSL1H470JN	CERAMIC	47PF	J		
C109,110			CE04KW1H2R2M	ELECTRO	2.2UF	50WV		
C111,112		*	CC45FSL1H470JN	CERAMIC	47PF	J		
C113-118			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C119			CQ93FMG1H103J	MYLAR	0.010UF	J		
C120			CQ93FMG1H102J	MYLAR	1000PF	J		
C122			CQ93FMG1H102J	MYLAR	1000PF	J		
C123			CQ93FMG1H103J	MYLAR	0.010UF	J		
C124			CQ93FMG1H102J	MYLAR	1000PF	J		
C125-130		*	CC45FSL1H101JN	CERAMIC	100PF	J	MYCTEQ	
C141			CQ93FMG1H103J	MYLAR	0.010UF	J		
C142			CQ93FMG1H151K	MYLAR	150PF	K		
C143			CQ93FMG1H103J	MYLAR	0.010UF	J		
C144			CQ93FMG1H151K	MYLAR	150PF	K		
C145			CQ93FMG1H103J	MYLAR	0.010UF	J		
C146			CQ93FMG1H151K	MYLAR	150PF	K		
C147-149		*	CK45FB1H471KMM	CERAMIC	470PF	K		
C150			CE04HW1H100M	NP-ELEC	10UF	50WV		
C171-176			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C177-182		*	CC45FSL1H151JN	CERAMIC	150PF	J		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

㉘

Ref. No	Address	New Parts	Parts No.	Description			Destination	Remarks
C202-208		*	CC45FSL1H101JN	CERAMIC	100PF	J		
C209			CE04KW1V4R7M	ELECTRO	4.7UF	35WV		
C210			CE04KW1C331M	ELECTRO	330UF	16WV		
C211			CE04KW1V4R7M	ELECTRO	4.7UF	35WV		
C212			CE04KW1C331M	ELECTRO	330UF	16WV		
C213-215			CE04KW1V4R7M	ELECTRO	4.7UF	35WV		
C216			CE04KW1H100M	ELECTRO	10UF	50WV		
C217		*	CC45FSL1H100DN	CERAMIC	10PF	D		
C218			CQ93FMG1H222J	MYLAR	2200PF	J		
C219			CE04KW1H100M	ELECTRO	10UF	50WV		
C220		*	CC45FSL1H100DN	CERAMIC	10PF	D		
C221		*	CC45FSL1H221JN	CERAMIC	220PF	J		
C222			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C223		*	CK45FB1H471KMM	CERAMIC	470PF	K		
C224			CE04KW1HR47M	ELECTRO	0.47UF	50WV		
C225			CQ93FMG1H223J	MYLAR	0.022UF	J		
C226			CE04KW1H2R2M	ELECTRO	2.2UF	50WV		
C227		*	CK45FB1H332KMM	CERAMIC	3300PF	K		
C228		*	CC45FSL1H221JN	CERAMIC	220PF	J		
C229		*	CC45FCH1H050CN	CERAMIC	5.0PF	C		
C230		*	CC45FCH1H220JN	CERAMIC	22PF	J		
C231		*	CC45FSL1H270JN	CERAMIC	27PF	J		
C232		*	CC45FSL1H220JN	CERAMIC	22PF	J		
C234			CE04KW1H010M	ELECTRO	1.0UF	50WV	MYCTEQ	
C235		*	CK45FB1H471KMM	CERAMIC	470PF	K	MYCTEQ	
C236			CE04KW1HR47M	ELECTRO	0.47UF	50WV	MYCTEQ	
C237			CQ93FMG1H473J	MYLAR	0.047UF	J	MYCTEQ	
C238			CE04KW1H010M	ELECTRO	1.0UF	50WV	MYCTEQ	
C239		*	CK45FF1H4722MM	CERAMIC	4700PF	Z	MYCTEQ	
C240		*	CC45FSL1H221JN	CERAMIC	220PF	J	MYCTEQ	
C241		*	CC45FCH1H050CN	CERAMIC	5.0PF	C	MYCTEQ	
C242		*	CC45FCH1H220JN	CERAMIC	22PF	J	MYCTEQ	
C243		*	CC45FSL1H270JN	CERAMIC	27PF	J	MYCTEQ	
C244		*	CC45FSL1H220JN	CERAMIC	22PF	J	MYCTEQ	
C245		*	CK45FB1H152KMM	CERAMIC	1500PF	K	MYCTEQ	
C246			CE04KW1V4R7M	ELECTRO	4.7UF	35WV	MYCTEQ	
C247			CE04KW1H100M	ELECTRO	10UF	50WV	MYCTEQ	
C248			CQ93FMG1H153J	MYLAR	0.015UF	J	MYCTEQ	
C249			CQ93FMG1H683J	MYLAR	0.068UF	J	MYCTEQ	
C250-252		*	CC45FSL1H100DN	CERAMIC	10PF	D		
C253			CE04HW1E100M	NP-ELEC	10UF	25WV		
C254-256			CE04KW1H100M	ELECTRO	10UF	50WV		
C257,258		*	CC45FSL1H220JN	CERAMIC	22PF	J		
C301,302		*	CK45FF1H103ZMM	CERAMIC	0.010UF	Z		
C303			CE04KW1H100M	ELECTRO	10UF	50WV		
C304		*	CK45FF1H103ZMM	CERAMIC	0.010UF	Z		
C305			CE04KW1H100M	ELECTRO	10UF	50WV		
C306		*	CK45FF1H103ZMM	CERAMIC	0.010UF	Z		
C307-309		*	CC45FSL1H101JN	CERAMIC	100PF	J		
C310			CE04KW1H100M	ELECTRO	10UF	50WV		
C311		*	CK45FF1H103ZMM	CERAMIC	0.010UF	Z		
C312			CE04KW1H100M	ELECTRO	10UF	50WV	MYCTEQ	
C313		*	CK45FF1H103ZMM	CERAMIC	0.010UF	Z	MYCTEQ	
C314			CE04KW1H100M	ELECTRO	10UF	50WV	MYCTEQ	
C315,316		*	CK45FF1H103ZMM	CERAMIC	0.010UF	Z	MYCTEQ	

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia

⚠ indicates safety critical components.

✱New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
C318			CE04KW1C331M	ELECTRO 330UF 16WV	MYCTEQ	
C319		✱	CK45FF1H103ZMM	CERAMIC 0.010UF Z	MYCTEQ	
C320,321		✱	CK45FF1H103ZMM	CERAMIC 0.010UF Z		
C322-324		✱	CC45FSL1H101JN	CERAMIC 100PF J	MYCTEQ	
C325			CE04KW1H100M	ELECTRO 10UF 50WV		
C326		✱	CK45FF1H103ZMM	CERAMIC 0.010UF Z		
C327			CE04KW1H100M	ELECTRO 10UF 50WV		
C328		✱	CK45FF1H103ZMM	CERAMIC 0.010UF Z		
C329		✱	CC45FSL1H100DN	CERAMIC 10PF D		
TC201			C05-0097-05	CERAMIC TRIMMER CAPACITOR(30PF		
TC202			C05-0097-05	CERAMIC TRIMMER CAPACITOR(30PF	MYCTEQ	
CN1			E40-9832-05	SOCKET FOR PIN ASSY		
CN2			E40-9830-05	SOCKET FOR PIN ASSY		
CN201			E40-9831-05	SOCKET FOR PIN ASSY		
CN202			E40-9832-05	SOCKET FOR PIN ASSY		
J1 ,2			E63-0139-15	PHONO JACK		
J3 ,4			E63-0169-05	PHONO JACK		
J201			E63-0162-05	PHONO JACK		
J202			E63-0163-05	PHONO JACK		
L201			L40-2201-17	SMALL FIXED INDUCTOR(22UH,K)		
L202			L40-2201-17	SMALL FIXED INDUCTOR(22UH,K)	MYCTEQ	
X201		✱	L77-2201-05	CRYSTAL RESONATOR(14.31818M)		
X202			L78-0272-05	RESONATOR (503.5K)		
X203		✱	L77-2202-05	CRYSTAL RESONATOR(17.73447M)	MYCTEQ	
X204			L78-0300-05	RESONATOR (500K)	MYCTEQ	
⚠ R317			RD14NB2E470J	RD 47 J 1/4W	MYCTEQ	
⚠ R326			RD14NB2E100J	RD 10 J 1/4W		
⚠ R327			RD14NB2E100J	RD 10 J 1/4W	MYCTEQ	
⚠ R328			RD14NB2E4R7J	RD 4.7 J 1/4W		
D11 -13			HSS104	DIODE		
D11 -13			1SS133	DIODE		
D201,202			HSS104	DIODE	MYCTEQ	
D201,202			1SS133	DIODE	MYCTEQ	
IC1 -6			NJM4580D	IC(OP AMP X2)		
IC1 -6			NJM4580D-D	IC(OP AMP X2)		
IC7 ,8			TC9164N	MOS-IC		
IC9			TC9162N	MOS-IC		
IC201		✱	SN761200N	ANALOGUE IC		
IC202			TC74HC4051AP	IC(ANALOG MULTIPLEXER)		
IC203			MC14577CP	ANALOGUE IC		
IC204		✱	MB90089PF-188	CUSTOM IC		
IC205			MM1067XD	IC(SYNC SEPARATION)		
IC206		✱	MB90089PF-188	CUSTOM IC	MYCTEQ	
IC207			MM1067XD	IC(SYNC SEPARATION)	MYCTEQ	
IC208			TC74HC4053AP	IC(ANALOG MULTIPLEXER)	MYCTEQ	
IC209		✱	LA7950	ANALOGUE IC	MYCTEQ	
Q1 -6			2SC2878(B)	TRANSISTOR		
Q7			DTA124ESA	DIGITAL TRANSISTOR		
Q7			UN4112	DIGITAL TRANSISTOR		
Q8 ,9			2SC2458(Y,GR)	TRANSISTOR		
Q8 ,9			2SC3311A(Q,R)	TRANSISTOR		
Q201			2SC2458(Y,GR)	TRANSISTOR		
Q201			2SC3311A(Q,R)	TRANSISTOR		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia
⚠ indicates safety critical components.

✱New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
Q202			2SA1048(Y,GR)	TRANSISTOR		
Q202			2SA1309A(Q,R)	TRANSISTOR		
Q203-205			2SC2458(Y,GR)	TRANSISTOR		
Q203-205			2SC3311A(Q,R)	TRANSISTOR		
Q206,207			2SC2878(B)	TRANSISTOR		
Q208			DTA113ZSA	DIGITAL TRANSISTOR	MYCTEQ	
Q208			UN4119	DIGITAL TRANSISTOR	MYCTEQ	
Q209			DTC113ZSA	DIGITAL TRANSISTOR	MYCTEQ	
Q209			UN4219	DIGITAL TRANSISTOR	MYCTEQ	
Q210			DTC113ZSA	DIGITAL TRANSISTOR		
Q210			UN4219	DIGITAL TRANSISTOR		
Q211			DTA113ZSA	DIGITAL TRANSISTOR		
Q211			UN4119	DIGITAL TRANSISTOR		
Q212			2SC2458(Y,GR)	TRANSISTOR		
Q212			2SC3311A(Q,R)	TRANSISTOR		
Q213,214			2SC2003(L,K)	TRANSISTOR		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico
Y : PX(Far East, Hawaii) **T** : Europe **E** : Europe **G** : Germany
Y : AAFES(Europe) **X** : Australia **M** : Other Areas **Q** : Russia
⚠ indicates safety critical components.

SPECIFICATIONS

AUDIO section

Rated power output during STEREO operation

150 watts per channel minimum RMS, both channels driven, at 6 Ω from 20 Hz to 20 kHz with no more than 0.03 % total harmonic distortion.(FTC)

Rated power output during SURROUND operation

FRONT
(1kHz, 0.7% T.H.D. at 6 Ω) ..... 150 W + 150 W
CENTER
(1kHz, 0.7% T.H.D. at 6 Ω) ..... 150 W
SURROUND
(1kHz, 0.7% T.H.D. at 6 Ω) ..... 150 W + 150 W

Total harmonic distortion ..... 0.003%(1 kHz, 75W, 6 Ω)
Frequency response
CD ..... 5 Hz ~ 85 kHz, +0.5 dB, -3 dB
Signal to noise ratio (IHF'66)
PHONO (MM) ..... 77 dB
CD ..... 97 dB
Input sensitivity / impedance
PHONO (MM) ..... 2.5 mV / 47 kΩ
CD ..... 200 mV / 47 kΩ
Output level / impedance
TAPE REC ..... 200 mV / 470 Ω
PRE OUT (FRONT, CENTER, SURROUND, SUBWOOFER) ..... 1 V / 1.2 kΩ
Tone control
BASS ..... ±10 dB (at 100 Hz)
TREBLE ..... ±10 dB (at 10 kHz)
LOUDNESS control
VOLUME at -40dB level ...+7 dB(100 Hz), +3 dB(10 kHz)

DIGITAL AUDIO section

Sampling frequency ..... 32 kHz, 44.1 kHz, 48 kHz
Input level / impedance / wave length
Optical ..... -15 dBm ~ -21 dBm, 600 nm ±30nm
Coaxial ..... 0.5 Vp-p / 75 Ω

VIDEO section

Video format ..... NTSC
VIDEO inputs / outputs
VIDEO (composite) ..... 1 Vp-p / 75 Ω
S-VIDEO (luminance signal) ..... 1 Vp-p / 75 Ω
(chrominance signal) ..... 0.286 Vp-p / 75 Ω

FM tuner section

Tuning frequency range ..... 87.5 MHz ~ 108 MHz
Usable sensitivity (MONO)
..... 1.6uV (75 Ω)/ 15.2 dBf (75 kHz DEV., SINAD 30 dB)
50dB quieting sensitivity
STEREO ..... 31.6uV (75 W)/ 41.2 dBf
Total harmonic distortion (1 kHz)
(for U.S.A. and Canada)
MONO ..... 0.2 % (65 dBf input)
STEREO ..... 0.5 % (65 dBf input)
(except for U.S.A. and Canada)
MONO ..... 0.6 % (65 dBf input)
STEREO ..... 0.7 % (65 dBf input)
Signal to noise ratio (1 kHz, 75 kHz DEV.)
MONO ..... 75 dB (65 dBf input)
STEREO ..... 68 dB (65 dBf input)
Stereo separation (1 kHz) ..... 40 dB
Selectivity (±400 kHz)
(for U.S.A. and Canada) ..... 70 dB
(except for U.S.A. and Canada) ..... 50 dB
Frequency response ..... 30 Hz ~ 15kHz,+0.5 dB, -3.0 dB

AM tuner section

Tuning frequency range (for U.S.A. and Canada)
10 kHz step ..... 530 kHz ~ 1,700 kHz
Tuning frequency range (except for U.S.A. and Canada)
9 kHz step ..... 531 kHz ~ 1.602 kHz
10 kHz step ..... 530 kHz ~ 1.610 kHz
Usable sensitivity (30% mod., S/N 20 dB)
..... 16 uV / (600 uV/m)
Signal to noise ratio (30 % mod. 1 mV input) ..... 48 dB

Relay and IR IN/OUT section (for U.S.A. and Canada only)
RELAY CONTROL terminal
Maximum output current ..... 20 mA
Operating voltage ..... 12 V
Output impedance ..... 470 Ω
IR RECEIVER IN terminal
Maximum output current ..... 20 mA
Operating voltage ..... 12 V
Output impedance ..... 470 Ω
IR REPEATER CONTROL terminals
Maximum output current ..... 20 mA
Operating voltage ..... 12 V
Output impedance ..... 470 Ω

Shape of plug to be connected

IR RECEIVER IN and RELAY CONTROL	IR REPEATER OUT
Stereo mini plug Sleeve, Tip, Ring	Mini plug (mono) Sleeve, Tip

IR IN/OUT specification

Terminal	IR RECEIVER IN	IR REPEATER OUT
To Tip	Signal	Signal
To Ring	Ground	——
To Sleeve	+12 V	Ground

RELAY CONTROL specification

Status	Power off	Power on	Power on and when switch to video input
To Tip	0 V	0 V	+12 V
To Ring	0 V	+12 V	+12 V
To Sleeve	Ground	Ground	Ground

KR-V999D/1090VR

SPECIFICATIONS

GENERAL

Power consumption ..... 4 A
AC outlet
SWITCHED ..... 2 (total 90 W, 0.75 A max.)
Dimensions ..... W : 440 mm (17-5/16")
H : 162 mm (6-3/8")
D : 392 mm (15-7/16")
Weight (Net) ..... 13 kg (28.7 lb)

RF Demodulator (DEM-999D) (only KR-V999D C,M,T type)

Input level
AC-3 RF ..... 50 mV p-p ~ 200 mV p-p
RF Frequency responce ..... 2.88 MHz ~ ±144 kHz
Output level / Impedance
Coaxial ..... 0.5 Vp-p / 75 Ω
Dimensions ..... W : 89 mm
H : 35 mm
D : 101 mm
Weight (Net) ..... 200 g

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.